1. **Abstraction** — At a basic level, abstraction is the process of "removing detail." Allows for large problems to be feasibly solved.

2. **Algorithm** — At its core, an algorithm is really just a generalized, conceptual solution to a problem that can later be implemented in some real-world form like a computer program.

3. **Ambiguous** — Describes a statement whose exact meaning can be interpreted in different ways. For example, "The girl saw a man on the hill with a telescope"

4. **Anomaly Detection** — The identification of unusual data records, that might be interesting or simply data errors and require further investigation.

5. **Application Program Interface** — Application program interface (API) is a set of routines, protocols, and tools for constructing software applications. An API specifies how software components should interact. In addition, APIs are used when programming graphical user interface (GUI) components.

6. **Application Program Interface (API)** — Simplify complex programming tasks by providing developers the building blocks necessary to interface with an existing environment or other software components.

7. **Artificial Programming Language** — An artificial language which is specifically designed for programming; usually developed relatively quickly by small groups for very specific purposes and is highly structured.

8. **ASCII** — This ASCII (American Standard Code for Information Interchange) table outlines a common set of conventions established for converting between binary values and alphanumeric characters.

9. **Association Rule Learning** — Searches for relationships between variables. For example, a supermarket might gather data on customer purchasing habits. Using association rule learning, the supermarket can determine which products are frequently bought together and use this information for marketing purposes. This is sometimes referred to as market basket analysis.

10. **Association Rule Mining** — An association rule is a link between one set of items and another. Specifically, association rules identify instances in which the appearance of one set items (the antecedent) imply that another set of items (the consequent) will also appear.

11. **Asymmetric Relationship** — These relationships are one-way, requiring action by only one party to create the relationship. Such as following a person on Twitter or subscribing on YouTube.

12. **Authentication** — The process of determining whether someone or something is, in fact, who or what it is declared to be.

13. **Automated Summarization** — A computer program produces a shortened version of a selected body of text

14. **Autonomous Technology** — Technology which is capable of performing actions and making decisions without user input. Raises ethical choices about which choice is correct such as self driving cars.

15. **Availability** — The reliability of access to information.

16. **Backdoors** — Used to access programs by administrators but can be found by hackers with malicious intent.

17. **Bandwith** — A measure of bit rate — the amount of data (measured in bits) that can be sent in a fixed amount of time.

18. **Big Data** — A broad term for datasets so large or complex that traditional data processing applications are inadequate.

19. **Binary** — A numeric system of base 2 that only uses combinations of the digits zero and one; this is used in one of the lowest levels of abstraction. Computers operate in binary, as they store data and perform calculations using only zeros and ones. While a single binary digit can be used to represent True (1) or False (0) in boolean logic, multiple binary digits can be used in conjunction to store large numbers and perform complex functions. Computers translate between binary and what you actually work with such as numbers and text.

20. **Binary** — Binary code is another example of a dichotomous relationship. Binary code is represented with the two symbols 1 and 0. In binary code, if something isn't 1 then it must be 0 and vice versa. An example of what binary code looks like is 10110. Unlike the alphabet, which uses the characters A—Z or decimal numbers, which use the digits 0—9, binary uses only 1s and 0s to represent something. These 1s and 0s are referred to as bits (short for binary digits), and they are foundational to digital computing.

21. **Binary Search**	A search algorithm that locates the position of a target value within a sorted array by repeatedly dividing the search interval in half; can only be used when the list is sorted. Because of its divide-and-conquer approach, the amount of work required to find an item grows much more slowly with Binary Search than with Sequential Search. In fact, with this logarithmic behavior	30. **Certificate Authorities**	Issue digital certificates that validate the ownership of encrypted keys used in secured communications and are based on a trust model.
22. **Bits: Binary Digits**	A bit (short for binary digit) is the smallest unit of data in a computer. A bit has a single binary value, either 0 or 1.	31. **CIA Triad**	Defines the target areas when developing a secure system includes confidentiality, integrity, and availability.
23. **Bluetooth**	Another wireless connectivity protocol intended specifically as a peer-to-peer connection between two close-range devices. The protocol specifies procedures for two devices to be "paired" with one another so that they can securely exchange data over the air, without the need for a physical connection.	32. **Ciphertext**	The encrypted message, formed by applying an encryption algorithm to the plaintext.
		33. **Classification**	The task of generalizing known structure to apply to new data. For example, an e-mail program might attempt to classify an e-mail as "legitimate" or as "spam."
24. **Boolean Function***	Any function based on the operations AND, OR, and NOT, and whose elements are from the domain of Boolean algebra. A function whose arguments, as well as the function itself, assume values from a two-element set (usually {0,1})	34. **Client**	Stands at one end of the communication process and typically represents the end-user.
		35. **Closed Platform**	Each company controls the data that they store and strictly regulates how that data can be accessed and modified by its users. For example you cant edit the Mac OS.
25. **Botnets**	Networks made up of remotely controlled computers infected with malware; one computer can control all of them. Important to monitor network usage, your computer could be part of one.	36. **Cloud Computing**	The ability to "offload" large amounts of computational and data storage efforts onto remotely hosted servers and online services.
26. **Bubble Sort**	Continuously steps through the list, swapping items until they appear in the correct order. Algorithm starts at the beginning of the data set, compares the first two elements, and if the first is greater that the second, it swaps them. It continues doing this for each pair of adjacent elements to the end of the data set. It then starts again with the first two elements, repeating until no swaps have occurred on the last pass.	37. **Clustering**	The task of discovering groups and structures in the data that are in some way or another "similar," without using known structures in the data.
		38. **Commerce**	The activity of buying and selling, especially on a large scale.
		39. **Common Carriers**	A classification for a person or company that transports goods or people for another party and that is responsible for any possible loss of the goods during transport. (Telephone Companies)
27. **Bugs/Errors**	Sometimes the design of the algorithm is flawed, leading to a program that misperforms. Other times, the algorithm is sound, but the program fails to accurately implement it in the chosen programming language. Both of these are examples of bugs.	40. **Communication**	The transmission of data from one computer to another, or from one device to another.
		41. **Compilation**	The process of translating high level programming languages (source code) to machine code.
28. **Caesar Cipher**	An encryption algorithm which works by aligning two alphabets against one another and offsetting them by a number of positions.	42. **Compiler**	A program which translates each of your high-level, human-readable instructions into a corresponding string of 1s and 0s that make sense to the computer's processor. The resulting string of binary information constitutes an executable program.
29. **Central Processing Unit**	CPU, or processor, is the brains of the computer where most calculations take place. Contains the circuitry necessary to interpret and execute program instructions.		

43.	**Computational Artifact**	Something created by a human using a computer and can be, but is not limited to, a program, an image, an audio, a video, a presentation, or web page file
44.	**Concordance**	Organizes based off of simple words.
45.	**Confidentiality**	The ability to limit access to information to a certain set of users.
46.	**Constant**	No matter how much a problem grows, the amount of work stays more or less the same.
47.	**Creative Commons**	One of several public copyright licenses that enable the free distribution of an otherwise copyrighted work. There are numerous varieties such as "no derivatives" and "non-commercial."
48.	**Crowdfunding**	Uses online access to customers as a means of funding projects. Sites like Kickstarter and Indiegogo were created to enable innovators a way of reaching out to potential customers and recruiting them as backers who might help make their idea a reality by providing initial "investment" funding.
49.	**Crowdsourcing**	The 'wisdom of the crowd' phenomenon occurs when a large number of individuals are asked to estimate something. The average of the estimates is usually extremely close to the actual result. This process is known as crowdsourcing and 'wisdom of the crowd' is often why it is used.
50.	**Cryptography**	The science of coding and decoding messages in order to keep them secure. Coding takes place using a key that ideally is known only by the sender and intended recipient of the message.
51.	**Cryptology**	The study of securing (or encrypting) information such that it is inaccessible by third parties.
52.	**Cybersecurity**	Measures taken to protect a computer or computer system (as on the Internet) against unauthorized access or attack
53.	**Data Breaches**	A data breach is an incident in which sensitive, protected or confidential data has potentially been viewed, stolen or used by an individual unauthorized to do so. Data breaches may involve personal health information (PHI), personally identifiable information (PII), trade secrets or intellectual property.

54.	**Data Mining**	Data mining is akin to the discovery of patterns in large data sets. Like ore mining, data mining begins with an exploration (analysis) of a resource pool (data), and proceeds to determine whether usable resources exist (correlations) and to what degree (how strong they are).
55.	**Data Persistence**	What happens online, stays online. Computer scientists refer to this as the persistence of digital data.
56.	**Data Structure**	A particular way of storing data.
57.	**DDoS: Distributed Denial-of-Service**	Multiple computers are infected with malware (malicious software) so that an attacker may coordinate them to send requests to a web server at the same time.
58.	**Debugging**	The process of identifying and removing errors from computer hardware or software.
59.	**Descriptive Statistics**	Provide information about collected data via statistics that you are probably familiar with — mean, median, mode, range, etc. They tend to "describe" circumstances, but don't offer conjectures about unknowns.
60.	**Digital Divide**	Describes the gap that exists between those who have sufficient access to information and communication technologies and those who do not. The four primary reasons are physical resources, opportunity, digital literacy, and digital skills.
61.	**Dimension Reduction**	A reduction in complexity by removing redundant or otherwise less significant details.
62.	**Domain Name System (DNS)**	For looking up IP addresses of domains. Correlates IP adresses with the site names we normally use such as www.quizlet.com/215446996
63.	**Efficiency**	How much work an algorithm requires to find the solution.
64.	**Electronic Voting**	A voting system in which votes are electronically submitted, tallied, and stored.
65.	**Encryption**	Securing information so that it is inaccessible to third parties.
66.	**Ethernet**	This protocol specifies the use of physical, short-range connections commonly used in local area networks (LAN), such as homes or offices, which uses coaxial cable, twisted pair, or fiber optic connections.
67.	**Even/Odd Parity**	Used to ensure the integrity of information, each row and column of a matrix should either be even or odd, if not the data is incorrect and will be corrected.

68. **Exponential**	A graph whose slope increases or decreases according to a linear function. For example, "X^2".	77. **High-Level Language**	Languages that are best for human communication. These languages are complex and use a high level of abstraction. They are symbolic and rely on strings of letters to form words that represent abstract concepts, ideas, actions, and objects.
69. **File Transfer Protocol (FTP)**	For sending files	78. **Hypertext Transfer Protocol (HTTP)**	The primary tranport protocols used by the World Wide Web for delivering web content. The protocol was designed to transmit hypertext documents that have been formatted according to another protocol, HTML (Hypertext Markup Language). There is also an "S" variation which stands for "Secure" and provides further encryption.
70. **Filter Bubble**	A filter bubble is a result of a personalized search in which a website algorithm selectively guesses what information a user would like to see based on information about the user (such as location, past click behavior and search history) and, as a result, users become separated from information that disagrees with their viewpoints, effectively isolating them in their own cultural or ideological bubbles.	79. **If-Else**	A structure related to selection which states that "if" one thing is true then this should happen, else that should happen. Only operates with Yes/No questions.
		80. **Image File Extension**	An image file format is a standardized means of storing and organizing digital images. The particular format used is denoted with a specific image file extension such as .jpg
71. **Floating Point Numbers**	As the name implies, floating point numbers are numbers that contain floating decimal points. Examples include, the numbers 5.5, 0.001, and -2,345.6789. Numbers without decimal places are called integers. Computers recognize real numbers that contain fractions as floating point numbers.	81. **Index**	Organizes based on ideas.
		82. **Infinite Loop**	Occurs when, in an if / then statement, the "then" code triggers the "If" condition. Thus, the set of code will repeat for eternity, or until the power shuts off.
72. **Flow Chart/Pattern**	A diagram that can be constructed to depict each step of the algorithm (usually represented by rectangles, diamonds, etc.) interconnected with arrows showing the general flow of the process	83. **Insertion Sort**	A simple sorting algorithm that is relatively efficient for small lists and mostly sorted lists. It takes elements from the list one by one and inserts them into a new sorted list. It is the quickest for large data sets.
73. **GIF (Lossy)**	Supports transparency, reduces file sizes, can load in segments, can create animation. Significantly reduces color variability. Limited color images such as images or graphs.	84. **Integers**	An integer is a whole number (not a fraction) that can be positive, negative, or zero. In computer science, an integer is a datum of integral data type, a data type that represents some finite subset of the mathematical integers. Integral data types may be of different sizes and may or may not be allowed to contain negative values.
74. **The Halting Problem**	Proved by Alan Turing to be computationally undecidable. He states that you cannot write a program that will tell you which computer programs will halt (i.e., exit) and which ones will continue forever (i.e., infinitely loop).		
		85. **Integrity**	The certainty that information is accurate.
75. **Heuristics**	A problem solver's "Rules of Thumb"; they serve as general guidelines meant to encourage progress toward a good answer, but with no guarantee of actually generating "the correct answer".	86. **Interactive Infographics**	Infographics are visual tools that allow information, data, or knowledge to be quickly and easily communicated through a single image. An interactive infographic allows users to dynamically manipulate the data in order to engage users and illustrate major concepts.
76. **Hexadecimal**	Hexadecimal describes a base-16 number system. That is, it describes a numbering system containing 16 sequential numbers as base units (including 0) before adding a new position for the next number. The hexadecimal numbers are 0-9 and then use the letters A-F. Used to represent digital data because it utilizes fewer digits than binary.	87. **Internet of Things**	The interconnection via the Internet of computing devices embedded in everyday objects, enabling them to send and receive data.

88.	**Internet Protocol (IP)**	Specifies how individual packets of information are packaged and labeled for delivery, much like the way that the postal service specifies how envelopes and packages should be sized, addressed, and stamped.
89.	**IP Address**	Specifies, the relative location of each node on the network, a unique numerical identifier, that allows other nodes to know which nodes they are directly connected to and to determine a route for sending data to its intended destination. Example, 74.207.227.244
90.	**IPv4**	The old yet still commonly used IP system which can only generate 4.3 billion unique, 32-bit addresses, which limits the Internet to a maximum capacity of no more than 4.3 billion nodes and some places are running out.
91.	**IPv6**	Uses 128-bit addresses — four times the length of the IPv4 addresses. With 128 bits of data packed into each address, this new standard is capable of sustaining more than 3.4×10^{38} individual nodes. That is 340 billion billion billion billion!
92.	**Iterations**	Iteration is the repetition of part of an algorithm until a condition is met or for a specified number of times. This is often called a 'loop'. Recursive functions repeatedly execute themselves as part of their operation. Upon completing all instructions and resetting to the first one iteration has been completed.
93.	**JPG (Lossy)**	Can decrease file sizes significantly, load in successively on web pages (blurry to crisp) Does not support transparency, too much quality can be lost making it visibly inferior. Photographs and Complex Images
94.	**Keyloggers**	Software/hardware device which tracks key clicks and screens; can be harmless such as companies monitoring employees
95.	**Latency**	The time elapsed between the transmission and the receipt of a request.
96.	**Libraries**	In computer science, a library is a collection of non-volatile resources that a program can use often to develop software. Libraries are particularly useful for storing frequently used routines because you do not need to explicitly link them to every program that uses them. The linker automatically looks in libraries for routines that it does not find elsewhere. Resources which may be found in libraries include data, documentation, message templates, pre-written code, classes, or values.
97.	**Linear**	As the size of a problem grows, the amount of work required grows at approximately the same rate.

98.	**Linear/Sequential Search**	A process that checks every element in the list sequentially until the desired element is found or all elements have been searched. Can be used in any type of list. Has linear performance.
99.	**Lists**	A data type which represents a countable number of ordered values, where the same value may occur more than once. Many objects can be easily stored in a list, and so lists have become a very useful and ubiquitous data structure in computer science.
100.	**Logarithmic**	Every doubling of the size of a problem only requires one extra unit of work.
101.	**Lossless Data Compression**	With lossless compression, every single bit of data that was originally in the file remains after the file is uncompressed. All of the information is completely restored. This is generally the technique of choice for text or spreadsheet files, where the loss of words or financial data could pose a problem. PNG is an image format that provides lossless compression.
102.	**Lossy Data Compression**	Lossy compression reduces a file by permanently eliminating certain information, especially redundant information. When the file is uncompressed, only a part of the original information is still there (although the user may not notice it). Lossy compression is generally used for video and sound, where a certain amount of information loss will not be detected by most users. JPEG provides lossy compression.
103.	**Low-Level Language**	Low-level languages are optimized for machines. Computers are built using highly structured circuitry that responds to very logical and clear signals. Because low-level languages are much more concrete and straightforward, with limited vocabulary and very structured syntax, nothing is left to interpretation.
104.	**Machine Code**	Machine languages are the most basic type of programming language. They represent the actual binary instructions issued to computer processors and are very difficult for humans to read. A direct, low-level translation from the high-level source code.
105.	**Malware**	Malicious software aimed at harming a computer/user.

106. **Matrices**	An array of values arranged in rows and columns. Used to determine the integrity of sent information. Bits of data are stored in matrices and each row has either an even or odd (choose one) amount of information. If one of the rows or columns is received with an incorrect value of bits in a row or column it can be corrected.
107. **Metadata**	Data about data. Can be descriptive data about an image, a Web page, or other complex objects. For example sorting a music collection alphabetically so albums can be easily found.
108. **Metadata**	Metadata is data that describes other data. Metadata summarizes basic information about data, which can make finding and working with particular instances of data easier. It provides information concerning an item's content such as image resolution and size.
109. **MOD Function**	A function which finds the remainder of a division problem. For example Mod 2 would find the remainder of x/2, thus determining if the number is even or odd.
110. **Moore's Law**	Moore noted that as the manufacturing tools and processes miniaturized over time, we were able to pack more and more of these tiny components into the same amount of space. Specifically, he observed that the number of transistors that could fit on a silicon chip roughly doubled every one to two years.
111. **Nesting**	Occurs when one if / else block is contained entirely within another allowing for multi-step decisions.
112. **Net Neutrality**	Concerns itself with ensuring equal and unrestricted access to all legal content that is available throughout the Internet. In principle, it argues that Internet service providers (ISP) and other gateway services that connect individual users to the wealth of content and services available across the network, should not discriminate against or favor certain content over other content.
113. **Nodes**	A machine or device that acts as either a communication endpoint (e.g., a client computer or a remote server), a connection point that links together two other nodes (e.g., a gateway, bridge, or modem), or a redistribution point that links together multiple nodes and other networks (e.g., a router, hub, or switch).
114. **Noise**	Irrelevant or meaningless data that has found its way into otherwise meaningful code. Noise can make it difficult for computers to efficiently and effectively represent binary as alphanumeric or other representations (e.g., images, audio).

115. **Open Directory Project (DMoz)**	Historically, there have been some attempts to overlay structure onto the Web. One of the most prolific is the Open Directory Project (aka DMoz), which contains structured lists of links to individual pages on the web. These directories form the structure and the links represent the data.
116. **Open Platform**	Do not have a single owner calling the shots. Instead, they might have a centralized committee of interested partners to coordinate and manage the development and growth of the platform. Can often involve Open Source Code which can be edited by anyone for their needs such as the Linux operating system.
117. **Outlier Detection**	The automated process of discovering data points that do not match the patterns inherent in the data as a whole.
118. **Parameters**	A numerical or other measurable factor forming one of a set that defines a system or sets the conditions of its operation. For example a user input of 7 could be a parameters which determine how many dice to roll.
119. **Parameters***	In computer programming, a parameter or "argument" is a value that is passed into a function. Most modern programming languages allow functions to have multiple parameters. While the syntax of a function declaration varies between programming languages, a typical function with two parameters may look something like this:

function graphXY(x, y)
{
...
}

generalize a solution by allowing a procedure to be used instead of duplicate code; provide different values as input to procedures when they are called in a program. |
120. **Phishing**	To masquerade as an official representative of an organization and ask or demand confidential information.
121. **Plaintext**	The original unencrypted message.
122. **PNG (Lossless)**	Decreases file size, advanced transparency, wide range of colors. Not all old browsers display these images the same. Images requiring transparency and fidelity, especially text
123. **Predictive Statistics**	May provide information about future (or merely unobserved or unknown) events based on previously collected and analyzed data.

124. **Prescriptive Statistics**	May provide information to maximize the chances of a future event occurring, based on comparing the predictive analyses of multiple options	
125. **Private Communication**	Allow one individual to specify their intended contact(s) and limit the conversation to just those parties. employ encryption so that the digital information that makes up the communication signal is encoded before it is transmitted across the Internet and then decoded only after it reaches its destination.	
126. **Procedure**	A procedure is a named collection of steps in an algorithm that can be reused anytime it is needed. A procedure is an abstraction because the details of how it is performed are only defined once. Repeated use of the procedure then ignores the details that define it.	
127. **Processing**	A textual programming language which is aimed at being easily accessible to beginners through visual feedback. Emphasizes the potential of coding in visual fields such as art and architecture.	
128. **Program Implementation**	Program implementation refers to how well a proposed program or intervention is put into practice and is fundamental to establishing the internal, external, construct, and statistical conclusion validity of outcome evaluations.	
129. **Programming Documentation**	A commentary on the program's code which can include... What does your application do? What problem does it solve? How is it used? What are the specifications for input? What constitutes valid input? Invalid input? What are some common examples of its usage? What are any limitations of which users need to be aware? How might the program differ from user intuition? How is it unlike other, similar applications?	
130. **Protocols**	A set of formal standards that specify the proper formatting of data, communication procedures, and handling of information between any two networked components.	

131. **Pseudocode**	Pseudocode is a detailed yet readable description of what a computer program or algorithm must do. It may also describe an operating principle. It is expressed in a formally-styled natural language rather than in a programming language intended for humans. The conventions of normal programming continue.	
132. **Psuedocode**	Pseudocode is a detailed yet readable description of what a computer program or algorithm must do. It may also describe an operating principle. It is expressed in a formally-styled natural language rather than in a programming language intended for humans. The conventions of normal programming continue.	
133. **Public Communication**	Information is available to anybody at anytime such as a web site.	
134. **Public Key Encryption**	Allows the generation of two keys: a public key (made available publically) and a private key (known only by the owner).	
135. **Quadratic**	As the size of a problem grows, the amount of extra work required increases much more quickly.	
136. **Raster Image**	An image represented via a data structure which relies on individual pixels	
137. **ReCAPTCHA**	A digital tool used to deter automated form-filling and exploitation of web-based registration systems. The funny looking words you see when making an account	
138. **Regression**	Attempts to find a function that models the data with the least error.	
139. **Repetition**	A synonym for loop and iteration.	
140. **Scalability**	How well an algorithm performs at larger and larger scales.	
141. **Scratch**	A visual based programming language which uses block to represent lines of code. Allows beginner programmers to focus on logic, not syntax.	
142. **Screen (data) Scraping**	The conversion of data formatted for human use to a format more easily used by automated computer processes. In particular, the conversion is usually oriented toward taking output produced for humans (such as display on a screen) and producing input for a computer to process (such as a file or the clipboard).	

143.	**Selection/Conditional**	One of the three building blocks of algorithms which adds conditions. Allows for statements such as if-else which can send an algorithm down one of two paths depending on if a condition is true or false.
144.	**Selection Sort**	In-place comparison sort that is inefficient on large lists. It is simple but generally performs worse than insertion sort. The algorithm finds the minimum value, swaps it with the value in the first position, and repeats these steps for the remainder of the list.
145.	**Sequencing**	The execution of each step/action of an algorithm in the precise order in which the statements are given. One of the three building blocks of algorithms. The other two logic structures are selection and iteration. In a sequence structure, an action, or event, leads to the next ordered action in a predetermined order. The sequence can contain any number of actions, but no actions can be skipped in the sequence. The program, when run, must perform each action in order with no possibility of skipping an action or branching off to another action. The term sequence is often applied to video and audio.
146.	**Server**	A centralized computer that all individual end users connect to. In other words, the server serves the needs of its clients (i.e., users).
147.	**Simple Mail Transfer Protocol (SMTP)**	Defines how all email transmission is handled, actually does not ensure total privacy. In fact, as an email message is transmitted from node to node throughout the public network of routers and gateways across the Internet, the contents of the messages are exposed in plain text.

148.	**Simulations**	The use of a computer to represent the dynamic responses of one system by the behavior of another system modeled after it. A simulation uses a mathematical description, or model, of a real system in the form of a computer program.
149.	**Social Engineering**	The psychological manipulation of people into performing actions or divulging confidential information.
150.	**Social Networking**	A virtual world which allows for communication between friends, family, and strangers with similar interests who in the past would have never crossed paths with you.
151.	**Source Code**	The programs that programmers write in high-level languages are known as source code. Technically, these source code files are not really programs, per se. They are the abstract, high-level instructions that define what the program is and how it will function.
152.	**Spiderbots**	Small programs that follow a very simple routine... Visit a series of web pages Gather all of the links on each page visited Add the links to its list of pages to visit in the future Repeat until it has visited all pages in its list
153.	**Spyware**	Software installed without a user's knowledge to track their activity, can access microphones and face-cams.
154.	**State**	Encapsulates attributes—a description of what the computer is doing at any given moment.
155.	**State Space**	Technically, the phrase state space refers to the space of potential possibilities. Remember the video of the noodle guy in which the state space was the potential number of noodles he makes every time he folds the existing noodles in half.
156.	**Statistical Analysis**	The science of collecting, exploring and presenting large amounts of data to discover underlying patterns and trends.
157.	**Strings**	A string is a data type used in programming, such as an integer and floating point unit, but is used to represent text rather than numbers. It is comprised of a set of characters that can also contain spaces and numbers. For example, the word "hamburger" and the phrase "I ate 3 hamburgers" are both strings. The length is an important string characteristic.

158.	**Structured Data**	On the other hand, structured data are easy to access and organize, but may lack the big picture and details that unstructured data may possess.
159.	**Summarization**	Providing a more compact representation of the data set, including visualization and report generation.
160.	**SVG (Lossless)**	Creates images which can scale in size wit no loss in quality. Uses a vector format which is not common. Images which must look clear on phone and television screens.
161.	**Switching**	The basis for if / else statements which allow programs to perform a different set of code depending on if a condition is met.
162.	**Symmetric Key Encryption**	Involves both parties using the same key to encrypt and decrypt data. Such as in a Caesar Cipher.
163.	**Symmetric Relationship**	involves mutual actions by both parties in the relationship. Such as 'friending' a person on Facebook.
164.	**TF x IDF (Term Frequency x Inverse Document Frequency)**	Assumes that only uncommon words are useful in a summary. Term frequency is how often the word occurs in the chosen document. Inverse document frequency is how many documents in a set contain an instance of the word. tf*log(idf)
165.	**TIFF (Lossy or Lossless)**	The lossless variety keeps the images in pristine condition (no compression). File sizes remain extremely large. Images which can not suffer from any loss of data.
166.	**Time Bombs**	A computer virus which lays dormant until a specific condition is met, either a specific set of data or after a predetermined time.
167.	**Transmission Control Protocol (TCP)**	Ensures that all packets of a data stream are transmitted and received exactly as originally sent. It specifies methods of performing error-checking analysis of the received packets to ensure that no error or loss of information was introduced along the way. Suited for applications that prioritize accuracy over speed such as e-mail.
168.	**Trojan Horses**	A type of malware disguised as safe software; often given through e-mail links, check to make sure security is active.
169.	**Unicode**	Unicode is a binary encoding system that can represent much more of the world's text than ASCII can. Unicode allows computers to represent most of the world languages' alphabets, not just English. The ASCII table includes 27 values (7 bits). Unicode includes 216 values (16 bits). which means: ASCII can represent 128 different characters. Unicode can represent 65,536 different characters!
170.	**Unstructured Data**	Unstructured data contain everything collected in "raw" form, but connections and relationship among strands of data are both harder to trace and much slower to process than structured data sets.
171.	**Usable Data**	Data is usable if you can use it, regardless of whether that data is informative or useful. Another aspect of usability is whether the means to process or analyze the data currently exist.
172.	**Useful Data**	Data is usable if you can use it, regardless of whether that data is informative or useful. Another aspect of usability is whether the means to process or analyze the data currently exist.
173.	**User Datagram Protocol (UDP)**	Similar to TCP but is better suited for applications in which speed is more important that accuracy or completeness of information, such as online gaming or video or audio streaming.
174.	**Variables**	A placeholder for a value that was unknown.
175.	**Vector Image**	Images represented through 2-dimensional point located polygons. Allows for shape, location, and direction, information to be expressed more concisely.
176.	**Vigenere Cipher**	An encryption algorithm which works by applying a key word to a plaintext. The key word is aligned with the plaintext and each letter of the keyword determines by how many places the plaintext should be rotated. For example "D" signals a rotation of 3. In short is uses multiple Ceasar Ciphers to encrypt a single plaintext making it more secure.
177.	**Viruses/Worms**	Spreads within a computer network and can multiply. Can be halted by anti-virus software.

178.	**Visual Programming Language**	Allows programmers to drag and drop pictures or icons into organized blocks that represent the different parts of a program. Block-based programming tools automatically handle all the grammar and syntax the programming language requires. This allows novice programmers to focus on the logic of their programs, rather than the syntax, spelling, capitalization, etc.
179.	**Wikis**	A platform in which multiple users are able to collectively contribute to a shared knowledge base. Rather than presenting its information through the filter or with the bias of a centralized editorial control, they rely on peer-based writing, fact checking, editing, and moderation thereby giving everyone a voice.
180.	**Wireless LAN**	The standard wireless protocol for Wi-Fi communications seen in most laptops, phones, tablets, and other networked devices that are not physically connected to a network.
181.	**World Wide Web (WWW)**	A content-oriented ecosystem that has been built atop the globally networked infrastructure of the Internet. It was designed primarily to provide an open platform that could provide uses from all over the world a standard and accessible means of communicating and sharing information online.