

Data base final

1. Normalization usually means to scale a variable to have a values between 0 and 1, while standardization transforms data to have a mean of zero and a standard deviation of 1. This standardization is called a z-score, and data points can be standardized with the following formula: A z-score standardizes variables.
2. First normal form (1NF) is a property of a relation in a relational database. A relation is in first normal form if and only if the domain of each attribute contains only atomic (indivisible) values, and the value of each attribute contains only a single value from that domain.
3. Third normal form (3NF) is a database schema design approach for relational databases which uses normalizing principles to reduce the duplication of data, avoid data anomalies, ensure referential integrity, and simplify data management. It was defined in 1971 by Edgar F.
4. Boyce–Codd normal form (or BCNF or 3.5NF) is a normal form used in database normalization. It is a slightly stronger version of the third normal form (3NF).
5. An operating system (OS) is system software that manages computer hardware, software resources, and provides common services for computer programs. ... Operating systems are found on many devices that contain a computer – from cellular phones and video game consoles to web servers and supercomputers. Some examples include versions of Microsoft Windows (like Windows 10, Windows 8, Windows 7, Windows Vista, and Windows XP), Apple's macOS (formerly OS X), Chrome OS, BlackBerry Tablet OS, and flavors of Linux, an open-source operating system.
6. Linux has long been the basis of commercial networking devices, but now it's a mainstay of enterprise infrastructure. Linux is a tried-and-true, open-source operating system released in 1991 for computers, but its use has expanded to underpin systems for cars, phones, web servers and, more recently, networking gear. Linux can be installed and used it as a desktop, firewall, a file server, or a web server. Linux allows a user to control every aspect of the operating systems. As Linux is an open-source operating system, it allows a user to modify its source (even source code of applications) itself as per the user requirements.
7. A Trojan horse or Trojan is a type of malware that is often disguised as legitimate software. Trojans can be employed by cyber-thieves and hackers trying to gain access to users' systems. Users are typically tricked by some form of social engineering into loading and executing Trojans on their systems.
8. The MD5 hashing algorithm is a one-way cryptographic function that accepts a message of any length as input and returns as output a fixed-length digest value to be used for authenticating the original message.
9. The Dark Web, or darknet, is a network of sites with encrypted content, accessible only with a secure suite of secure-browsing tools, like Tor. ... The software encrypts user traffic and passes the IP address through the complex of Tor nodes.
10. To access the dark web, you have to use the Tor-browser. This is a special browser that allows you to visit .onion addresses. These .onion addresses make up the dark web.
11. Some hackers are criminals and use their computer skills to harm or damage computer systems. These people are called black hat hackers. White hat hackers, on the other hand, use their computer skills to perform ethical hacking.
12. Kali Linux.

- 13 Since Windows is by far the most prevalent operating system, just the sheer number of devices ensures that Windows users will end up getting more viruses. Now that Macs are selling pretty well, the number of incidents of viruses and malware has gone up too. OS X is inherently not any more secure than Windows.
- 14 A software for which the original source code is made freely available and may be redistributed and modified according to the requirement of the user. ... As the source code of an open source program can be modified by anyone without any licence to do the same, this is also free to download.
- 15 Microsoft either forgot or disregarded that fact when it released Windows Vista, because, despite a long beta period, a lot of existing software and hardware were not compatible with Vista when it was released in January 2007. ... In other words, Vista broke a lot of the things that users were used to doing in XP.