

Database : Concepts and Fundamentals

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A data is a information which is collected logically in an organized way so that it can be easily accessed, managed and updated. Data can be entered through input devices such as mouse, keyboard, touchscreen etc.

Database Concepts and Fundamentals



FUNDAMENTAL OF DATABASE

Database can be defined under two terms which are frequently used:

(a) Data : These raw and unorganized facts that need to be processed.

(b) Information : when data is processed, organized, structured or presented in a given context to make it useful or meaningful.

TYPES OF DATABASE

THEY ARE MAINLY OF THREE TYPES:

(a) Network Database : Data is represented as collection of records and relationships among data are represented as links.

(b) Hierarchical Database : In this data is organized in the forms of tree with nodes.

(c) Relational Database : This is also known as structured database in which data is stored in the form of tables.

ELEMENTS OF DATABASE

A database consists of several different elements. The entities, attributes, relationship are the basic concepts of database.

ENTITY : It is an object that has its existence in the real world.

Attributes : It describes the characteristics or properties of entity.

SOME DEFINITION

CACHE MEMORY : The speed of CPU is extremely high compared to the access time of main memory. To decrease the mismatch in operating speed, a small memory chip is attached between CPU and main memory whose access time is very close to the processing speed of CPU.

BULLETIN BOARD SYSTEM (BBS) : An online information system, usually, set-up by an individual on a non-profit basis for the enjoyment of other individual with similar interest.

Time to Revise

1. To insert a copy of the clipboard contents, whatever was last cut or copied at the insertion point, what is to be done?

- (a) Paste
 - (b) Stick in
 - (c) Fit in
 - (d) Push in
2. The contents of are lost when the computer turns off.
- (a) Storage
 - (b) Input
 - (c) Output
 - (d) Memory
3. Tangible, physical computer equipment that can be seen and touched, is called
- (a) Hardware
 - (b) Software
 - (c) Storage
 - (d) Input/output
4. The enables you to simultaneously keep multiple web pages open in one browser window.
- (a) Tab box
 - (b) Pop-up helper
 - (c) Tab row
 - (d) Esc key
5. The main memory of a computer can also be called
- (a) Primary storage
 - (b) Internal memory
 - (c) Primary memory
 - (d) All of these
6. A disk on which you store information, is
- (a) Plate
 - (b) Data disk
 - (c) Paper disk
 - (d) TV disk
7. Internet requires
- (a) An international agreement to connect computers
 - (b) A local area network
 - (c) A commonly agreed set of rules to communicate between computers
 - (d) A world wide web
8. When speaking of computers input and output, input refers to
- (a) Any data processing that occurs from new data input into the computers
 - (b) The transmission of data that has been input into the computer
 - (c) Data or information that has been entered into the computer
 - (d) Both 'b' and 'c'
9. What resides on the motherboard and connects the CPU to other components on the motherboard?

- (a) Input unit
- (b) System bus
- (c) ALU
- (d) Primary memory

10. Which of the following is billionth of a second?

- (a) Gigabyte
- (b) Terabyte
- (c) Nanosecond
- (d) Microsecond

SOLUTION

- 1. (a)
 - 2. (d)
 - 3. (a)
 - 4. (c)
 - 5. (d)
 - 6. (b)
 - 7. (c)
 - 8. (d)
 - 9. (b)
 - 10. (c)
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