Chapter- 2:

Measuring the computer's Memory

Byte:

* The basic unit for measuring the memory of a computer is byte

* A byte is usually enough to store a single character,
  - letter
  - Numer

Secondary storage devices	Storage capacity
pen drive	8 GB
Hard disk	1 TB
3·5 inch floppy disk	1·44 MB
digital versatile disc	4 GB
compact disc	700 MB

Nibble:
* A group of 4 bits is known as nibble

* 1 nibble — 4 bits — half byte

Answer these Questions.

① what is machine language?

Ans: * It is a language only understood by a computer machine.

* It is a language made up of 0s and 1s.

② Can we give commands to a computer in machine language?

Ans: Yes we can give commands to a computer in machine language.

③ what are binary digits?

Ans: The digits 0 and 1, which the computers work with are called binary digits or bits.

④ Define a byte?

Ans: * A byte is the basic unit for measuring the memory of a computer

* It consist of group of 8 bits.

⑤ Ans: gigabyte and terabyte the larger units other than kilobyte and megabyte used to measuring computer's memory.

TEST YOURSELF

A. Tick (✓) the correct answer.

1. Computers use and store information using only

   a. **0 and 1.** ✓
           b. 2 and 3.
           c. 4 and 5.

2. 1 byte equals to

   a. 9 bits.
           b. **8 bits.** ✓
           c. 10 bits.

3. A half byte is a

   a. KB.
           b. MB.
           c. **nibble.** ✓

4. Which of the following is a secondary storage device?

   a. **Pen drive** ✓
           b. Monitor
           c. Keyboard

5. The storage capacity of a compact disc is

   a. **700 MB.** ✓
           b. 200 MB.
           c. 100 MB.

B. Write the full form of the following.

1. KB — *Kilobyte*
2. MB — *megabyte*
3. GB — *gigabyte*
4. TB — *terabyte*

C. Fill in the blanks.

1. 1 KB = **1024** bytes
2. 1 MB = **1024** KB
3. 1 GB = **1024** MB
4. 1 TB = **1024** GB

D. Arrange these units in descending order of their magnitude.

bit   terabyte   kilobyte   megabyte   byte   gigabyte

Terabyte → Gigabyte → Megabyte → Kilobyte → Byte → bit

E. How many bytes does it take to store the following in the computer's memory?

▸ This is my book.

Tick (✓) the correct statements and put a cross (✗) against the wrong ones.

1. Computers process and store information using 1 and 0 only. ✓

2. A 1 or 0 is called a binary digit. ✓

3. A group of 6 bits is known as a nibble. ✗

4. TB is the short form of terabyte. ✓

5. Both RAM and hard disk capacities are measured in bytes. ✓