

Data Types in C

C language provides us the way to hold any type of data in it. It is called data type. In C language data types are classified into two categories:-

- a. Primary Data Types
- b. Secondary Data Types

a. Primary Data Types

Data types which are used to build other data types is called Primary Data Types. For example:- character, integer, float, double, etc.

b. Secondary Data Types

Data types that are derived from primary data types is called Secondary Data Types. For example: arrays, pointers, function types, structures, etc.

C Data Types

```
graph TD; A[C Data Types] --> B[Primary data types]; A --> C[Secondary data types]; B --> D["• Character<br>• Integer<br>• Float<br>• Double"]; C --> E["• Array<br>• Pointer<br>• Structure<br>• Union"]
```

Primary data types

- Character
- Integer
- Float
- Double

Secondary data types

- Array
- Pointer
- Structure
- Union

Statement

A **statement** is a command which is given to instruct computer to perform task and take a specific action. There are two types of statement. They are:

- a. Simple statement
- b. Compound statement

a. Simple Statement

The statement which consists of an expression followed by a semicolon is known as simple statement.

Examples:- `b=5;`
`x=a+b;`

b. Compound Statement:

The statement which consists of several individual statements enclosed in a pair of brackets { } is known as compound statement.

Example:-

```
{  
  r=5;  
  area=3.14*r*r;  
}
```

Control structure

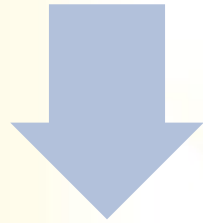
The structure which is used to alter the flow of sequence of instructions during program execution time is known as control structure. There are four types of control structure. They are :-

- a. Sequential structure
- b. Selection / Decision /Branching structure
- c. Looping structure
- d. Jumping structure.

a. Sequential structure:

Sequential structure: The structure which is used to flow instruction sequentially in program is called sequential structure.

Start



Statements



End

Examples:

WAP to find out the following terms:

1. $\text{sum} = a + b$

2. $\text{sub} = a - b$

3. $\text{pro} = a * b$

4. $p = 2(l + b)$

5. $a = l * b$

6. $v = l * b * h$

7. $v = \pi r^2 h$

B. Questions: (03/17/2077)

4. Define C-Programming. Explain the data types of C-Programming. [1+4]
5. Define Statement. Explain its types with examples. [1+4]