

C Language



Data Types :-

1. Primitive Data type

- 1. Int
- 2. long Int
- 3. float
- 4. double
- 5. char

Data Types :-

2. Non Primitive Data types :-

- Derived data type
 1. Array
 2. Function
 3. Pointer
- User defined data type
 1. Structure
 2. Union

Types of Operators

Arithmetic operators : $+$, $-$, $*$, $/$, $\%$

Increment / Decrement :

1. Pre increment
2. Post increment
3. Pre Decrement
4. Post Decrement

Types of Operators

Assignment Operator :- ==

Comparison Operator :- <, >, <=, >=, ==, !=

Ternary Operator :- ? :

Bitwise Operator :- \ (OR), & (AND)

Shift Operator:- <<, >>

Types of Loops

Entry Control Loop

1. For Loop
2. While Loop

Exit control

1. Do while loop

Array

An array is a data structure that stores a collection of elements of the same data type in contiguous memory locations.

- Types of Arrays are:
- 1D single dimension
- 2D multi dimension

Function

A set of statement that when called perform some specific tasks.

Types of Function:-

1. With return type and with argument
2. With return type and without argument
3. Without return type and with argument
4. Without return type and without argument

Example:

```
#include <stdio.h>

int main() {
    int a = 10, b = 20, temp
    printf("Before swapping: a = %d, b = %d\n", a, b);
    temp = a;
    a = b;
    b = temp;
    printf("After swapping: a = %d, b = %d\n", a, b);
    return 0;
}
```

Thank you

-Yuvraj Dodiya