Basics of C language

1. Who found C language and why.
2. Uses of C today.
3. Data type in C.
4. Conditional statement .
5. Loops in C.

Who found C language and why

- Who found C language

- Dennis M. Ritchie developed C in 1972 while at Bell Laboratories.

- Why C language was founded.

- C was developed to overcome the limitation of Programing like B and BCPL and write the UNIX operating system in a more portable, efficient, and flexible way.

Uses of C today.

- Today, C is still widely used because of its speed, efficiency, and close control over hardware.
- C is mainly used for

  1. Operating system like windows, Linux and mac Os.
  2. Game engine and graphics library.
  3. Compiler and programming tool.
  4. Its influence is also seen in modern languages like C++, Java, and Python.

Data type in C.

- int→ Stores integers
- int age = 25;
- float→ Stores decimal numbers
- float price = 99.99;
- char→ Stores single characters
- char grade = 'A';
- double →Stores large or precise decimal numbers
- double pi = 3.1415926535;

Conditional statement

- If Statement – Executes code if condition is true

A=5, B=3;

If (a > b) {

   printf ("A is greater");

}

- If...else – Adds an alternative block if condition is false

if (a == b)

{   printf("Equal");}

Else

 {   printf("Not Equal");}

- Else if – Checks multiple conditions

```
int marks = 75;
if (marks >= 90)
 {   printf("Grade A");}
 else if (marks >= 75)
 {   printf("Grade B");}
else if (marks >= 60)
 {   printf("Grade C");}
 else
 {   printf("Fail");}
```

- Switch statement – Selects code to run based on variable value

Int day = 3;

```
switch(day) {
    case 1: printf("Monday"); break;
    case 2: printf("Tuesday"); break;
    case 3: printf("Wednesday"); break;
    default: printf("Invalid day");
}
```

Loops in C

- For loop – Used when the number of iterations is known

int i =1;

For (i = 1; i <= 5; i++)

 {

   printf ("%d\n", i);

}

- While loop – Checks condition before each iteration

```
Int i = 1;
while (i <= 5) {
    printf("%d\n", i);
    i++;
}
```

- Do-while loop – Executes at least once, checks condition after

```
Int i = 1;
do {
    printf("%d\n", i);
    i++;
} while (i <= 5);
```

THANK YOU

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