Control Statements

Subject: C Language

1. Decision Control Statements
2. Iterative Control Statements
3. Switch Case Control Statements
4. Go to Control Statements.

I. — : Decision Control Statements :—

i) if
ii) if else
iii) Conditional Operator

Example of if :—

if (condition)
{
 —————
 ————— } if block
 —————
}

NOTE :-
• If block ke andar agar ek hi statement hai to Curli bracket {} use karne ki koi need nahi hai.
• Same thing apply on else block.
• No keyword is a function.
• If ke baad jo parenthesis likha hota hai uske andar jo condition hota hai woh agar true ho tab Curli bracket {} ke andar ka code run hota hai.

Example of if - else :-

```
if (condition)
{
    _____
    _____      } if block
    _____
}
else
{
    _____
    _____      } else block
    _____
}
```

NOTE:-
- Jab if Condition false ho jata hai tab else ke curli bracket ke andar ka Code run karta hai.
- else Condition kabhi bhi alone nahi likha jata.
- else Condition hamesha if ke saath likha jata hai aur just if ke baad likha jata hai.

Example of Conditional (Ternary) Operator :-

Expression1 ? Expression2 : Expression3
Condition   True   False

Q- write a program to check whether a given number is a positive or non-positive.

Solution:-
```
#include <stdio.h>
int main()
```

```
{
    int number;
    Printf ("Enter a number: ");
    Scanf ("%d", &number);
    number > 0 ? printf ("Positive") : printf ("Non-Positive");
    return 0;
}
```

NOTE: if else is not an expression.

Example :-   κ = if (condition)

· This example
is wrong because
iss tarah se aap
if-else ko nahi
likh sakte. ~~ki~~
But Conditional
Operator ko likh
Sakte hai.

Iss pure line
of code ko hum
statement bolte
hai.

```
{
    ____
    ____
}
else
{
    ____
    ____;
}
```

NOTE: Conditional operator is an expression.

Example :-   κ = Condition ? True : False;

2.   ____ : Nested if else : ____

⇒ Nested if else ka matlab hota hai ki if
else ke andar if else ho.

Example :-

```
if (condition)
{
      if (condition2) {
          // statement
      } else {
          // statement
      }
} else {
    // statement
}
```

3.   -:- if else ladder -:-

=> An if-else ladder checks multiple Conditions one by one. As soon as a condition is true, its block executes and the rest are skipped.

Example :-

```
if (condition) {
    // statement
} else if (condition) {
    // statement
} else if (condition) {
    // statement
} else {
    // statement
}
```