

conditional operator:

it allows us to make decisions in code. they check conditions (expression that result in true or false) and execute different blocks of code accordingly

Types of conditional statement:

if statement: execute a block only if the condition is true

2. if..else statment: provide two paths - one if condition is true, another if false

3. if..elif..else ladder: multiple conditions checked one by one

4. nested if: using one if inside another

if statement: execute a block only if the condition is true

syntax:

```
if(condition):  
    statement
```

x=10

```
if (x>5):  
    print("x is greater then 5")
```

2. if..else statment: provide two paths - one if condition is true, another if false

syntax:

```
if(condition):  
    statement  
else:  
    statement
```

x=10

```
if (x>5):  
    print("x is greator then 5")  
else:  
    print("x is less then 5")
```

3. if..elif..else ladder: multiple conditions checked one by one

syntax:

```
if(condition1):  
    statement  
elif(condition2):  
    statement2  
elif(condition3):  
    statement3  
else:
```

```
statement4
```

other program

```
if(condition1):
    statement
else:
    if(condition2):
        statement2
    else:
        if(condition3):
            statement3
        else:
            statement4
```

Bitwise operator:

Bitwise operators are operators that work directly on the binary (bit-level) representation of integers. They perform operations bit by bit

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nested if else:

syntax:

```
if(cond1): //outer if
    if(cond2): //inner if
        statement of inner if
    else:
        statement of inner else
else:
    statement of outer if
```

```
n = int(input())
```

```
if(n>=0):
    if(n>0):
        print("+ve")
    else:
        print("Zero")
else:
    print("-ve")
```