

08-09-2025 Monday

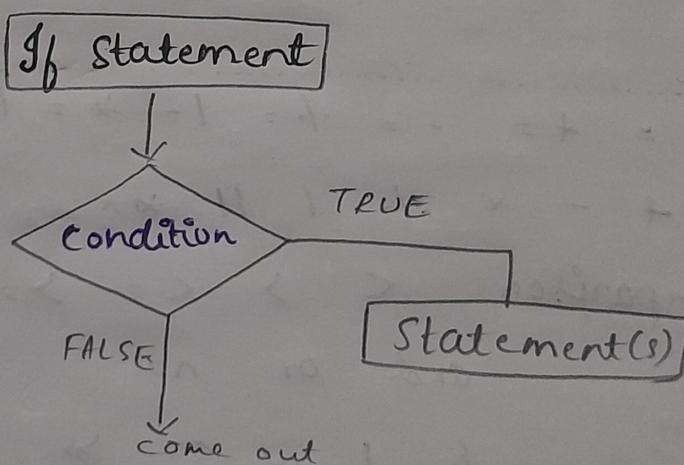
Conditional Statement: used to make decisions in the code.

Types in python:

- 1) if - executes a block only if the condition is True.
- 2) if...else - executes ~~if~~ (if If will be True) otherwise else.
- 3) if ..elif ... else ladder - multiple conditions checked one by one.
- 4) Nested if - using one if inside another.

1) if statement -

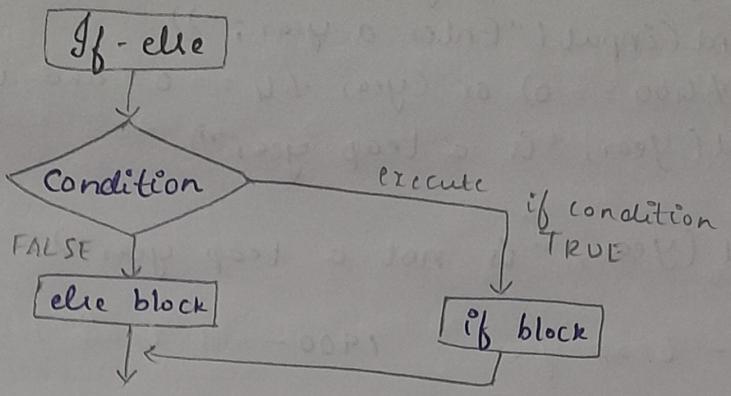
Syntax: `if (condition):
 Statements .`



Ex: Eligibility checking for election voting in India.

```
age = int(input("Enter your age : "))  
country = input("Enter your country : ")  
if (age >= 18 and country == 'India'):  
    print("Eligible for voting")
```

2) if - else statement



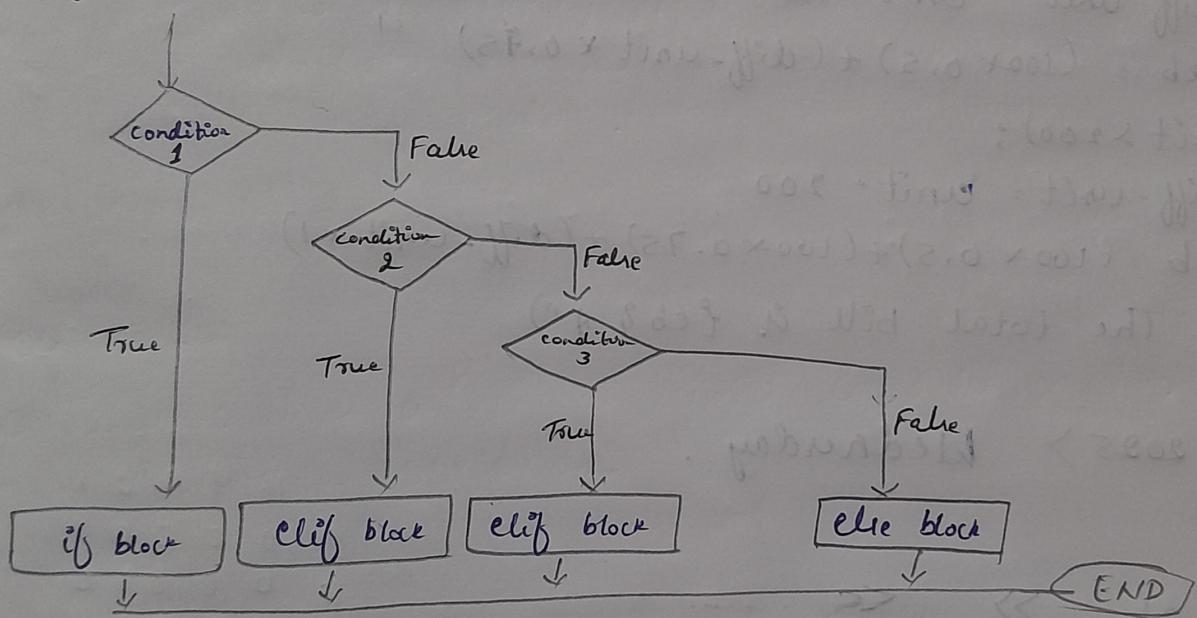
Syntax:

```

if (condition):
    Statements
else:
    Statements.
  
```

Indentation space which indicates the relationship b/w the lines.

3) if..elif..else ladder:



Syntax

```

if (Condition 1):
    Statement of condition 1
elif (Condition 2):
    Statement of C2
else:
    if (C3):
        Statement of C3
    else:
        else block statements.
  
```

like: if (C1):
sta -

elif (C2):
sta

elif (C3):
sta

else:
else block sta

Q) WAP to check leap year or not.

```
year = int(input("Enter a year:"))
```

```
if (year % 400 == 0) or (year % 4 == 0 and year % 100 != 0),  
    print(year, "is a leap year")
```

else:

```
    print(year, "is not a leap year").
```

Op: 2024 - Leap year

1900 - Not leap year

2000 - is leap year

calculate Electric Bill

```
unit = int(input("Enter units:"))
```

```
if unit >= 0 and unit <= 100:
```

```
    eb = unit + 0.5
```

```
elif unit >= 101 and unit <= 200:
```

```
    diff_unit = unit - 100 # ex: 126 - 100 = 26
```

```
    eb = (100 * 0.5) + (diff_unit * 0.75)
```

```
elif unit > 200:
```

```
    diff_unit = unit - 200
```

```
    eb = (100 * 0.5) + (100 * 0.75) + (diff_unit * 1)
```

```
print(f"The total bill is {eb} $")
```