DAY-05

September 09

Assignment operators: These are used to assign values to the variables.

Examples:

a = 5

a

5

a += 4

a

10

a -= 3

a

7

a **= 2

a

49

a = a//5

a

9

Identity Operators: Used in loops and conditional statements.

is   is not

a = 8

b = 3

a **is** b

False

a **is not** b

True

a = 8

b = 8

a **is** b

True

Membership Operators:

I am the member of your family **- False**

I am **not** a member of your family **- True**

you are a member of your family **- True**

you are **not** a member of your family **- False**

num = [1,8,3,9,0]

1 **in** num

True

2 **in** num

False

8 **not in** num

False

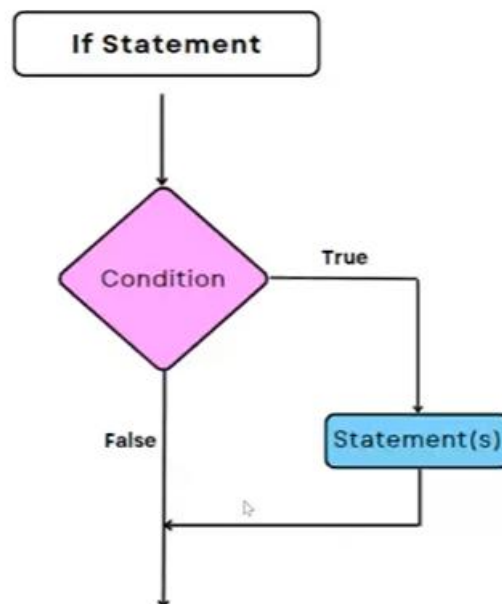**Conditional Statements**: It allows us to make decisions in code.

They check conditions(expression in true or false) and execute different blocks of code accordingly.

Types of conditional statements in python:

1. if statement - executes a block only if the condition is true.

2. if.. else statement - provides 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 statement inside another if statement

1. if statement –

Syntax:

if(condition):

    statements

Example:

#eligibility checking for election voting in india

age = int(input("Enter your age: "))

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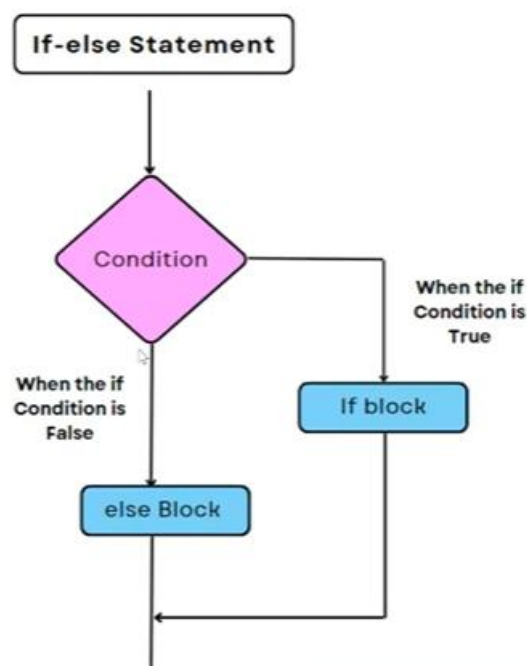
```
if(age>=18 and country=="India"):
    print("eligible for voting")
```

Enter your age: 12

Enter your country : India

In case of developer checking internal conditions it is fine to use if condition but when we are performing any user based operations it is necessary to use if else to avoid dilemma.

2. if.. else statement –

Syntax:

```
if(condition):
    statements
else:
    statements
```

Example:

#eligibility checking for election voting in india

```
age = int(input("Enter your age: "))
```

```
country = input("Enter your country : ")

country = country.lower()

print(country)

if(age>=18 and country=="india"):

    print("eligible for voting")

else:

    print("Not eligibile for voting")
```
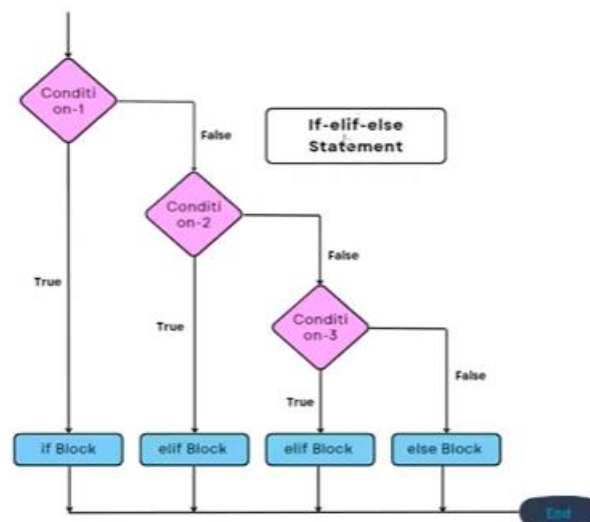
Enter your age: 25

Enter your country : INDIA

india

eligible for voting

3. if....elif..else ladder –

Syntax:

```
if(condition1):

    statements of condition1

else:
```

```
        if(condition2):

            statements of condition2

        else:

            if(condition3):

                statements of condition3

            else:

                else block statements
```

Simplified syntax:

```
if(condition1):

    statements of condition1

elif(condition2):

    statements of condition2

elif(condition3):

    statements of condition3

else:

    else block statements
```