Identity operator:
is isnot

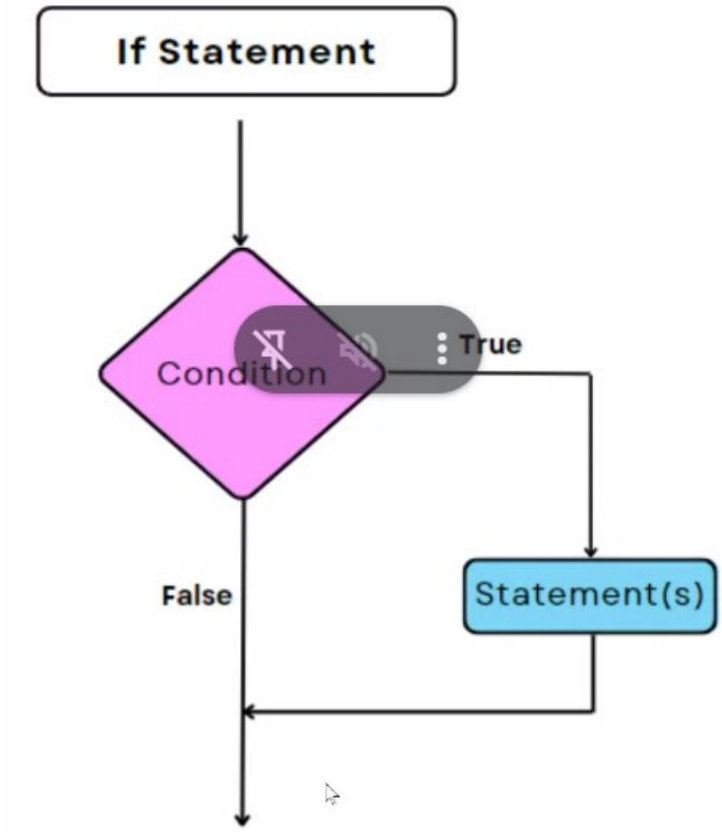
membership operator:
in notin

bitwise operator:
will teach in class

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:
1. 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
Algorithems:
1.if statement: execute a block only if the condition is true
syntax:

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

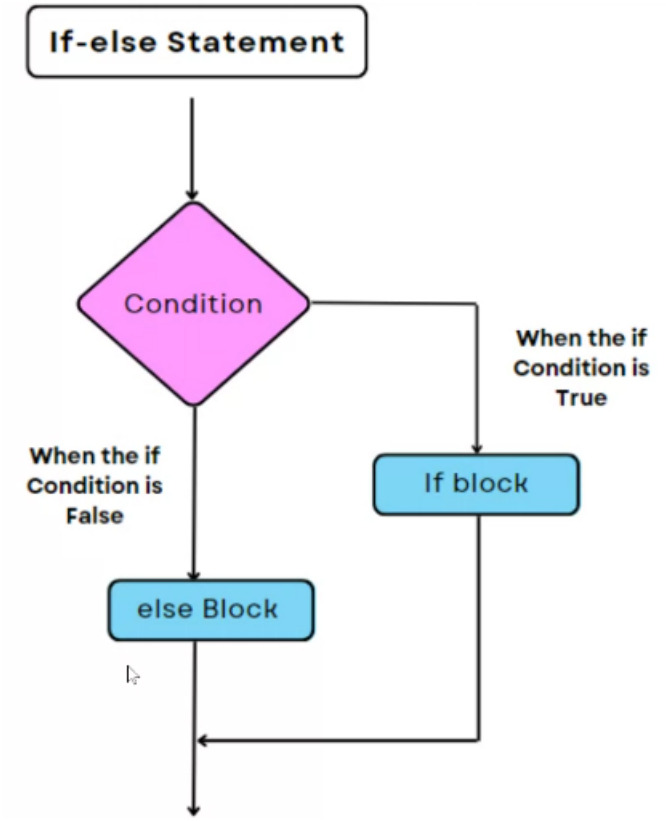
```
x=10
if (x>5):
        print("x is greater then 5")
```



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

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

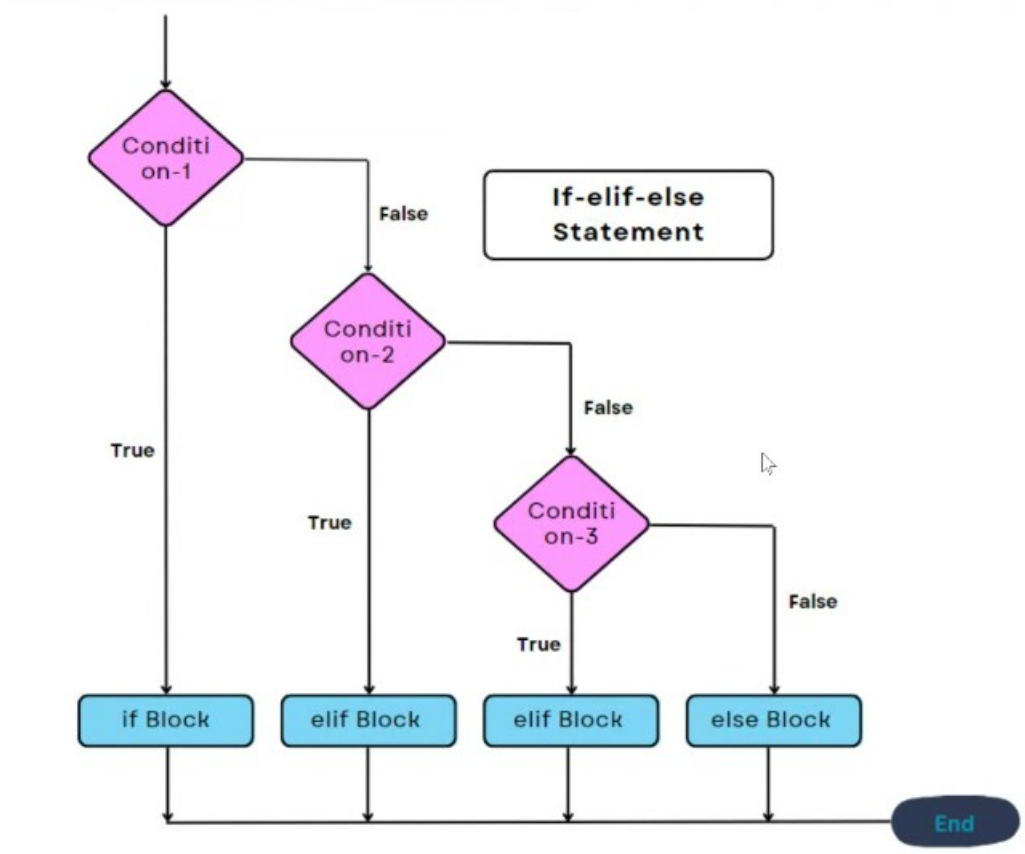
```
x=10
if (x>5):
        print("x is greater then 5")
else:
        print("x is less then 5")
```



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
```



write a program to print eligibility for voting in india

```
age = int(input("enter age of candidate: "))
country = str(input("enter country name: "))
region == country.lower()
print(region)
if(age>18 and region =="India"):
        print("candiate is eligible for voting")
else:
        print("Candidate not eligible for voting")
write a program to check the given number is +ve -ve or zero
Number = float(input("enter a number: "))
if(number>0):
```

```
        print("positive number")
elif(number<0):
        print("negative number")
else:
        print("number is 0")
```

take input precentage value from user and print their result
85-100 ==> distinction'
60-84 ==> first class
50-59 ==> pass
35-49 ==> pass
0-34 ==> fail

```
percentage = float(input("enter percentage"))
if(percentage >= 85 and percentage <= 100):
print("distinction")
elif(percentage >= 60 and percentage <=84):
print("first class")
elif(percentage >= 50 and percentage <= 59):
print("second class")
elif(percentage >= 35 and percentage <= 49):
print("pass")
elif(percentage >= 0 and percentage <= 34):
print("fail")
else:
print("enter correct percentage")
```