

08-sep-25:-

Special Operators :-

Identity & Membership operators

→ exactly same.

Identity operators

1) is 2) is not

a=9 b=2	a=9 b=9
a is b	a is b
false	True
a is not b	a is not b
True	false

Membership operator

1) in 2) not in

I am a member of your family - True in

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

You are a member of your family - True in

You are not a member of your family - False not in

Pet = ['dog', 'cat', 'cow', 'rabbit']

'cat' in Pet	'cat' not in Pet
True	false
'lion' in Pet	'lion' not in Pet
false	True

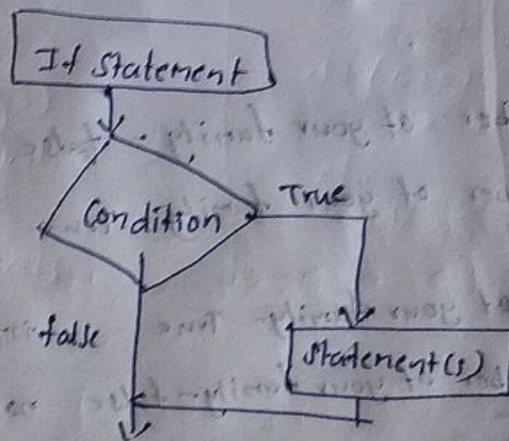
Conditional statements :-

It is allow 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 statements:

- 1) if statement - execute a block only if the condition is True
- 2) if.. else statement - provides two paths: one if condition is True, another if else false.
- 3) if.. elif.. else ladder - Multiple conditions checked one by one
- 4) nested if - using one if inside another.

1) If-statement



$x = 10$

if ($x > 5$):

Print('x is greater than 5')

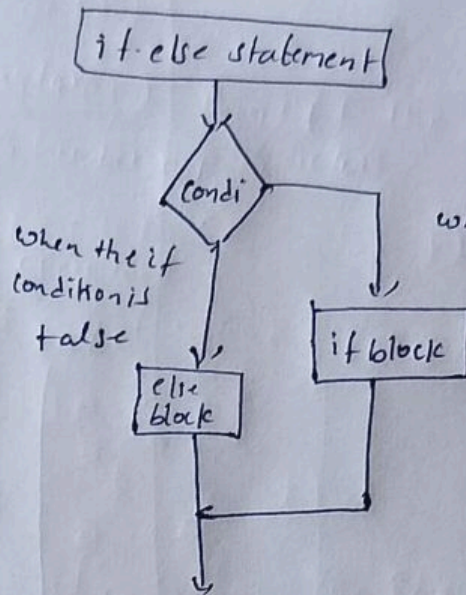
Syntax:

if (condition):

Statements

o/p: x is greater than 5

② If-else statements



Syntax:-

If (condition):

Statements

else:

Statements

$x = 2$

If (4 > 5): → Here only we can write condition
Print("x is greater than 5")

else: → we can't write the condition

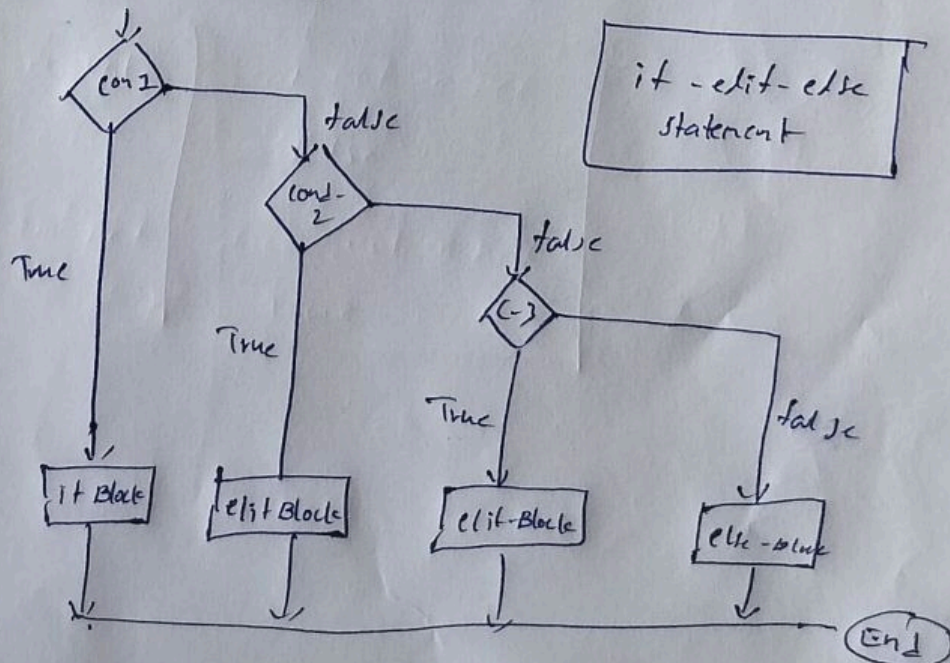
Print("x is not greater than 5")

↳ execution enters to the else block
x is not greater than 5.

User concern

Some people say
+ Pass
Some people say
nothing
So
if else
user concern

3) if..elif..else ladder:-



Syntax:

if (condition1):

Statements 1

else:

if (condition2):

Statements 2

else:

if (condition2):

Statements

else:

Statements

if (cond1):

Statements 1

elif (condition2):

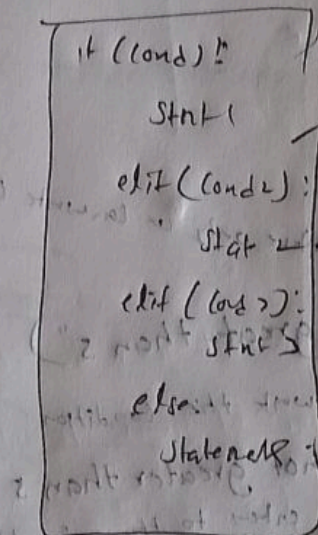
Statements 2

elif (cond3):

Statements 3

else:

Statements



Flowchart for if-elif-else statements

