NOTE: print (f " _____ ")

f string method manual and variable, we can combine together we can write a print statement ["without using ,]

1. Arithmetic Operator ✓
2. Relational ✓
3. Logical ✓
4. Assignment
5. Bitwise
6. Identity
7. Membership

08/09/2025 Monday

4. Assignment Operators

$=$, $+=$, $-=$, $*=$, $/=$, $\%=$, $//=$, $**=$

```
a = 5
print (a)      o/p 5      [∵ 5 is assigning to "a"]

a += 4
print (a)      o/p 9      #[a = a + 4]      5 + 4 = 9

a -= 3         o/p 6      9 - 3 = 6

a **= 2        o/p 36     a = a**2      6**2 (6)² = 36
```

* To reassigning the value to the same variable, we use assignment operator.

$a // = 5$ (or) $a = a // 5$ $= 7$ $\frac{36}{5} = 7$

* Instead of writing the same variable name again & again , ...

5. Bitwise Operator.

6. Identity Operators :- i) is   ii) is not

```
a = 8       a is b → FALSE
b = 3       a is not b → True
c = 8       a is not c → False
            a is c → True
```

* It checks whether both values are same (or) different.

7. Memberrshi Operators   i) in   (ii) not in

- I'm the member of yr family — False
- I'm not the member of yours family — True
- You are a member of yours family — True
- You are not a — " _____ of yours family " — False

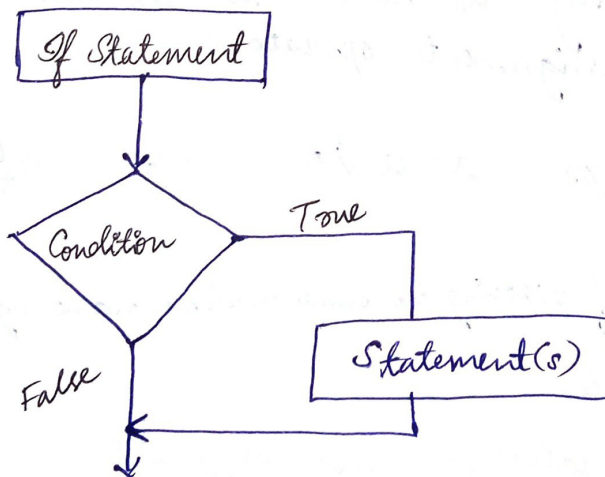Ex   num = [1, 8, 5, 10]

1 in num → True
8 not in num → False   2 in num → False

⇒ CONDITIONAL STATEMENTS : It allows us to make decissions in code and execute diff blocks of code accordingly. (expressions that results in True / False)

Types of CS in python.

(i) if statement — execute a block of code only if the condition is True.

(ii) if...else statement — provides 2 paths ; one if condition is True and another if False.

(iii) if...elif...else ladder — Multiple conditions checked one by one.

(iv) Nested if — Using one if inside another.

(i) if statement :

If Statement → Condition → True → Statement(s)
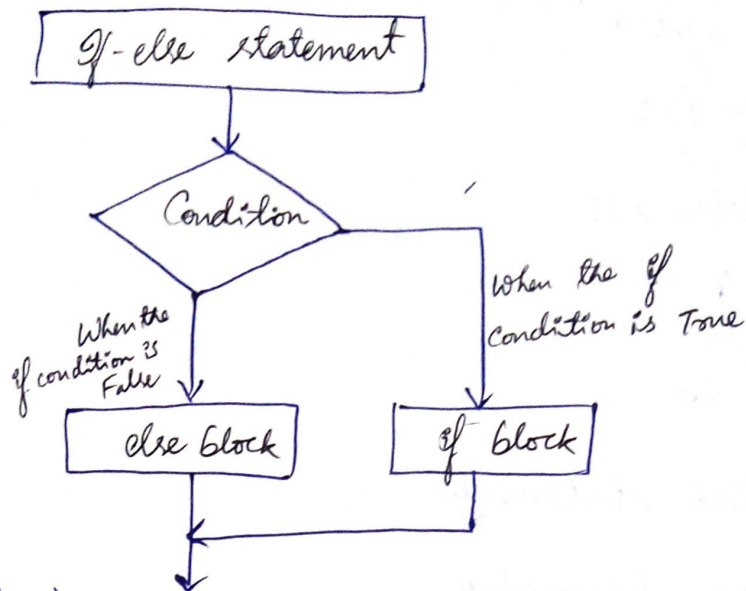Condition → False

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

if-else statement

Condition

When the if condition is False → else block
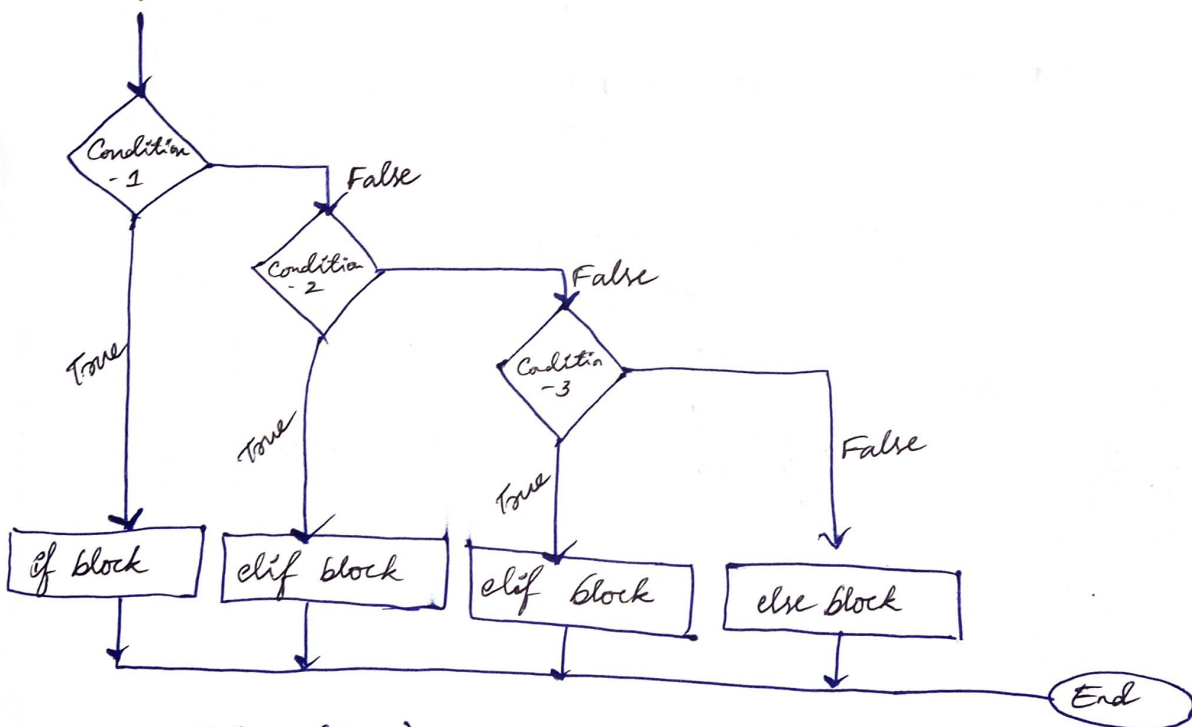
When the if condition is True → if block

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

NOTE: INDENTATION - Represents the relationship b/w the lines.
Python is Case-Sensitive.

3. **If...elif...else ladder:**

Condition-1 → True → if block
False → Condition-2 → True → elif block
False → Condition-3 → True → elif block
False → else block
End

Syntax: if (condition1):
      Statement of Condition 1
  else:
    if (condition 2):
      Statement of C2
    else:
      if (C 3):
        St of C3
      else:

else Block statement.

Easiest syntax:

```
if (condition 1):
    st of C1
elif (condition 2):
    st of C2
elif (c 3):
    st of C3
else:
    else block statements
```