```
# if
# if if
# if esle
# if elif
# if elif else
```

▾ IF condition

if "condition":

```
  # body of if condition
```

```
# if "condition":
#      #body of the if condition
```

```
if True:
    print("body of if condition")

     body of if condition
```

```
if False:
    print("body of if condition")
```

```
if False:
    print("body of if condition")
```

```
print("out of if condition")
print(10+20)
```

```
    out of if condition
    30
```

```
if True:
    print("body of if condition")
print("out of if condition")
print(10+20)
```

```
    body of if condition
    out of if condition
    30
```

```
num = 10
if num > 5: # 10> 5 --- True
    print("Num is greater")
```

```
    Num is greater
```

```
num = int(input("enter a number which want to compare with five:"))
if num > 5: # 3>5 ----False
    print("Num is greater")
print("Process end")
```

```
    enter a number which want to compare with five:3
    Process end
```

```
num = int(input("enter a number which want to compare with five:"))
if num > 5: # 30 > 5 ----True
    print("Num is greater")
print("Process end")
```

```
    enter a number which want to compare with five:30
    Num is greater
```

```
      Process end
```

```
  n = 2
  if n > 0:
      print("positive number")
```

```
      positive number
```

```
  n = -1
  if n > 0:
      print("positive number")
  print("Negative number")
```

```
      Negative number
```

```
  n = int(input("enter a nuber"))
  if n == 0:
      print("Equal")
```

```
      enter a nuber0
      Equal
```

```
  n = int(input("enter a nuber"))
  if n == 0:
      print("Equal")
  print("not equal")
```

```
      enter a nuber12
      not equal
```

```
  num = int(input("enter a number which want to compare with five:"))
  if num > 5: # 10 > 5
```

```
    print("Num is greater")
#print("Process end")
```

```
    enter a number which want to compare with five:10
    Num is greater
```

```python
num = int(input("enter a number which want to compare with five:"))
if num > 5:

    print("Num is greater")
print("Process end")
```

```
    enter a number which want to compare with five:3
    Process end
```

```python
v = int(input("enter a number"))
print(type(v))
print(v+2)
#print(v)
```

```
    enter a number3
    <class 'int'>
    5
```

▾ If ELSE

```python
# if "condition":
#       #Body of If block
# else:
#       #body of else block


num1  = 10
num2  = 20
```

```python
if num1 > num2: # 10 > 20 ----False
    print(" num1 is greater")
else:
    print("num2 is greater")
```

```
 num2 is greater
```

```python
if True:
    print("if block")
else:
    print("else block")
```

```
 if block
```

```python
if False:
    print("if block")
else:
    print("else block")
```

```
 else block
```

```python
m = 2
if m > 0: #True ---- 2 > 0
    print("the number is greater than zero")
else:
    print("number is not greater than zero")
```

```
 the number is greater than zero
```

```python
m = -1
if m > 0: #False ---- -1 > 0
    print("the number is greater than zero")
else:
    print("number is not greater than zero")
```

```
 number is not greater than zero
```

```
n = 2
if n > 0:
    print("positive number")
print("Negative number")
```

```
    positive number
    Negative number
```

```
n = 2
if n > 0:
    print("positive number")
else:
    print("Negative number")
```

```
    positive number
```

```
n = 2
if n > 0:
    print("positive number")
else:
    print("Negative number")
```

```
    positive number
```

▾ If elif

```
num11 = 20
if num11<30: # 20 < 30 ----- true
    print("num11 is less that 30")
elif num11>10:
    print("num11 is greater than 30")
```

```
        num11 is less that 30
```

```
num11 = 20
if num11 > 30: # 20 > 30 ----- False
    print("num11 is greater that 30")
elif num11 > 10:
    print("welcome")
```

```
    welcome
```

```
num11 = 20
if num11 > 30: # 20 > 30 ----- False
    print("num11 is greater that 30")
elif num11<10:
    print("num11 is greater than 10")

elif num11==20:
    print("both num11 ans 20 are equal")
```

```
    both num11 ans 20 are equal
```

```
b =  10
b1 = 20

if b > b1: # 10 > 20 --- False
    print("b is greater")
else:
    if b1>b:
        print("b1 is greater")
    else:
        if b==10:
            print("b is equal to 10")
```

```
        b1 is greater
```

▾ If elif and else

```python
num1  = int(input("enter a numbr1:"))
num2 = int(input("enter a numbr2:"))
if num1==num2:
    print(" both are eqaul")
elif num1!=num2:
    print(" both are not eqaul")
else:
    print("Terminate")
```

```
    enter a numbr1:10
    enter a numbr2:10
     both are eqaul
```

```python
num1  = int(input("enter a numbr1:"))
num2 = int(input("enter a numbr2:"))
if num1==num2: # 10 == 20 -- False
    print(" both are eqaul")
elif num1!=num2: # 10 != 20 --- True
    print(" both are not eqaul")
else:
    print("Terminate")
```

```
    enter a numbr1:10
    enter a numbr2:20
```

```
     both are not eqaul

num1  = int(input("enter a numbr1:"))
num2 = int(input("enter a numbr2:"))
if num1==num2: # 12 == 23 ---- False
    print(" both are eqaul")
elif num1 > num2: #  12 > 23 ------ False
    print(" both are not eqaul")
else:
    print("Terminate")
```

```
    enter a numbr1:12
    enter a numbr2:23
    Terminate
```

▾ IF IF

```
d = 12
dd = 20

if d==dd: # 12 ==20 ---false
    print("bothe are equal")
if d>dd: # 12 >20 -- false
    print("d is greater")
```

```
d = 12
dd = 20

if d==dd: # 12 ==20 ---false
    print("bothe are equal")
if d>dd: # 12 >20 -- false
    print("d is greater")
else:
    print("terminate")
```

```
    terminate
```

```
d = 12
dd = 20

if d < dd: # 12 < 20 --- True
    print("d is small")
if d < dd: # 12 >20 -- True
    print("dd id greater")
else:
    print("terminate")
```

```
    d is small
    dd id greater
```

Colab paid products - Cancel contracts here