**Conditional Handling in Python**

Conditional statements in Python allow you to control the flow of your program based on specific conditions. They enable you to make decisions and execute different 1 code blocks depending on whether a certain condition is true or false.

* If
* If else
* elif ladder
* nested if else

**1.If**

* if is used to decide whether a certain statement or block or statements will be executed or not i.e if a certain condition is true then a block of statement is executed otherwise not

**syntax:**

if condition:

statement 1

statement 2

statement 3

statement 4

**example:**

age = 18  
 if age >= 18:  
 print("You are an adult.")

output: You are an adult

**Example2:**

a=20

b=10

if a>b:

print(“a is greater”)

output: a is greater

**2. If else:**

**Syntax:** in the case of simple if it is possible to represent what is the action needs to be done if the condition is true. But there is no option to specify what action needs to be done. If the condition is false, in if-else text expression is true if block will get execute otherwise else part will get execute.

if condition:

# code to execute if condition is True

else:

# code to execute if condition is False

**Example:**

number = 10  
if number > 0:  
 print("Positive number")  
else:  
 print("Negative or zero")

output: Positive number

**3.elif ladder :**

to test the sequence of condition elif ladder is useful. The test expression is false in the case of it, then only it moves to the elif statement otherwise body of if block will get executed. If in case all the text expressions get failed then the by default else part will get execute.

**Syntax:**

if condition1:

# code to execute if condition1 is True

elif condition2:

# code to execute if condition2 is True

elif condition3:

# code to execute if condition3 is True

else:

# code to execute if none of the above conditions are True

**Example:**

#elseif ladder  
number = -5  
  
if number > 0:  
 print("Positive number")  
elif number == 0:  
 print("Zero")  
else:  
 print("Negative number")

Output: Negative number

**4. nested if else:**

writing if inside of other if statements. If the condition is true inside we will test other condition also.

**Syntax:**

if outer\_condition:

# code to execute if outer\_condition is True

if inner\_condition:

# code to execute if both outer and inner conditions are True

else:

# code to execute if outer condition is True, but inner condition is False

else:

# code to execute if outer condition is False

**Example:**

age = 25  
nationality = "Indian"  
  
if age >= 18:  
 if nationality == "Indian":  
 print("Eligible to vote in India")  
 else:  
 print("Check eligibility in your country")  
else:  
 print("Not eligible to vote")

output:

Eligible to vote in India

**Control Statements:**

**break statement**: break statement is used to terminate the loop before the ending the sequence . it brings control out of the loop.

**Ex:**

for i in range(10):  
 if i == 5:  
 break  
 print(i)

output:

1

2

3

4

**continue statement:** if returns the control to the beginning of the loop.

for i in range(10):  
 if i % 2 == 0:  
 continue  
 print(i)

output:

1

3

5

7

9