**CONTROL STATEMENTS AND LOOPS**

**Conditional statements**

FOR

WHILE

BREAK

CONTINUE

PASS

IF

ELSE

ELIF

NESTED-IF

**Iterative statements**

**Transfer statements**

**FLOW CONTROL**

* Meaning of Conditional statements:
* Conditional statements are also called decision-making statements. we use those statements when we want to execute a block of code when the given condition is true (or) false.
* IF:

It is used to check a condition and execute it if the condition holds true.

Example: x=10

y=5

if x>y:

print(“x is greater than y”)

output: x is greater than y

* ELSE:
* If the condition is true, the if block code is executed, and if the condition is false, the else block code is executed.

Example: x=10

y=5

if x>y:

print(“x is greater than y”)

else:

print(“x is less than y”)

* ELIF:
* Elif is short for else if and is used when the first if statement isn’t true, but you want to check for another condition.

Example: x=10  
if x>10:  
 print("x is bigger than 10")  
elif x==10:  
 print("x is equal to 10")  
else:  
 print("x is neither bigger than 10 or equal to 15")

Output: x is equal to 10

* FOR LOOP:
* This type of loop executes a code block multiple times and abbreviates the code that manages the loop variable.

Example: games=(“volleyball”,” Football”,” Cricket”,”Tennis”)

For x in games:

Print(x)

Output: volleyball

Football

Cricket

Tennis.

* WHILE LOOP:
* Repeats a statement or group of statements while a given condition is TRUE.

Example: i=1

While i < 4:

Print(i)

Output: 1

1 etc.

* BREAK:
* Will terminate the loop if the condition is true.

Example: for i in “bhavya”:  
 if I == ”v”:  
 break  
 print(i)

Output: b

h

a.

* CONTINUE:
* Will skip the current iteration if the condition is true.

Example: Example: for i in “bhavya”:  
 if i == ”v”:  
 continue  
 print(i)

Output: b

h

a

y

a.

* PASS:
* The pass statement is used as a placeholder for future code. nothing happens in the present code.

Example:: for i in “bhavya”:  
 if i == ”v”:  
 pass  
 print(i)

Output: b

h

a

v

y

a.

* RANGE:
* The range function returns a sequence of numbers, starting from 0 by default, and increments by 1, and stops before a specified number.

Example: for x in range(1,5):  
 print(x)

Output: 1

2

3

4.