### **For loops**

For loop is used to iterate over elements of a sequence. It is often used when you have a piece of code which you want to repeat “n” number of time.

In Python, “for loops” are called **iterators.**

Just like while loop, “For Loop” is also used to repeat the program.

But unlike while loop which depends on condition true or false. “For Loop” depends on the elements it has to iterate.

#How to use For Loop for String

#use a for loop over a collection

Months = ["Jan","Feb","Mar","April","May","June"]

for m in Months:

print m

#How to use break statements in For Loop

#use a for loop over a collection

#Months = ["Jan","Feb","Mar","April","May","June"]

#for m in Months:

#print m

# use the break and continue statements

for x in range (10,20):

if (x == 15): break

#if (x % 2 == 0) : continue

print x

#How to use "continue statement" in For Loop

#use a for loop over a collection

#Months = ["Jan","Feb","Mar","April","May","June"]

#for m in Months:

#print m

# use the break and continue statements

for x in range (10,20):

#if (x == 15): break

if (x % 5 == 0) : continue

print x

#How to use "enumerate" function for "For Loop"

#use a for loop over a collection

Months = ["Jan","Feb","Mar","April","May","June"]

for i, m in enumerate (Months):

print i,m

# use the break and continue statements

#for x in range (10,20):

#if (x == 15): break

#if (x % 5 == 0) : continue

#print x

### **While loops**

While Loop is used to repeat a block of code. Instead of running the code block once, It executes the code block multiple times until a certain condition is met.

How to use "While Loop"

#Example file for working with loops

#

x=0

#define a while loop

while(x <4):

print x

x = x+1

#How to use "For Loop"

#Example file for working with loops

#

x=0

#define a while loop

# while(x <4):

# print x

# x = x+1

#Define a for loop

for x in range(2,7):

print x

PSEUDOCODE EXAMPLES

**FOR LOOP OVER A COLLECTION:**

Initialise List Names

Names = ['Siya', 'Tiya', 'Guru', 'Daksh', 'Riya', 'Guru']

For i in length of names

Output Names[i]

If Names[i] = “Guru” THEN

Output “FOUND THE NAME GURU”

Break

End IF

Else

Continue

End For

**BREAK STATEMENT INSIDE NESTED LOOPS:**

For i in length 4

For j in length 4

If j = 2 THEN

Break

Output “The number is ” +i “,” +j

End For

**CONTINUE INSIDE WHILE LOOP:**

Initialise variable i

I = 0

While i <= 10

If i = 7 THEN

I += 1

Continue

Output “The number is ,”+i

i+=1

End While