Python for loops – II

Author – Srishti Sawla

Range()

To loop through a set of code a specified number of times, we can use the range() function,

The range() function returns a sequence of numbers, starting from 0 by default, and increments by 1 (by default), and ends at a specified number.

Example

Using the range() function:

for x in range(6):
  print(x)

len()

We can use the len() function in For loop. Let's see the below example.

ben10 = ['Jetray', 'EchoEcho', 'AlienX','DiamondHead', 'SwampFire']

i = 0

for i in range(0, len(ben10)):

   print(ben10[i])

In the above code, we have defined one List and then iterate that List from 0 to the length of the List. Then we printed the aliens one by one.

Help()

The Python help function is used to display the documentation of modules, functions, classes, keywords, etc.

The help function has the following syntax:

help([object])

The Python help function is used to display the documentation of modules, functions, classes, keywords, etc.

Output:

Help on built-in function print in module built-ins:

print(...)

   print(value, ..., sep=' ', end='\n', file=sys.stdout, flush=False)

   Prints the values to a stream, or to sys.stdout by default.

Optional keyword arguments:

file: a file-like object (stream); defaults to the current sys.stdout.

sep: string inserted between values, default a space.

end: string appended after the last value, default a newline.

flush: whether to forcibly flush the stream..

Coding Questions :

1. Write a program to print first 10 natural numbers
2. Write a program to print first 10 even numbers
3. Write a program to print first 10 odd numbers in reverse direction.
4. Write a program to print a table
5. Write a program to calculate factorial of a number
6. Write a program to check if a number is prime or not
7. Write a program to print following patterns

    a. *
        **

        ***

        ****

    b. ****

        ***

        **

        *

    c. *

        **

        ***

        ****

        ***

        **

        *

    d. *

        **

        ***

    e.   *

          * *

```
      * * *
    * * * *
```

f. 1

12

123

1234

12345

g. 1

2 3

4 5 6

7 8 9 10