**Practical No: 8**

**Aim:** Print all Numbers in a Range Divisible by a Given Number

**Course Outcome:** Write ‘Python’ programs using arithmetic expressions and control structure.

**Requirements: Computer, Python 3.3.34, Vs Code.**

**Theory:**

**For Loop :** The for loop in Python is used to iterate over a sequence ([list](https://www.programiz.com/python-programming/list), [tuple](https://www.programiz.com/python-programming/tuple), [string](https://www.programiz.com/python-programming/string)) or other iterable objects. Iterating over a sequence is called traversal.

### Syntax of for Loop

for val in sequence:

loop body

Here, val is the variable that takes the value of the item inside the sequence on each iteration.

Loop continues until we reach the last item in the sequence. The body of for loop is separated from the rest of the code using indentation.

## IF: **Python Conditions and If statements**

Python supports the usual logical conditions from mathematics:

* Equals: a == b
* Not Equals: a != b
* Less than: a < b
* Less than or equal to: a <= b
* Greater than: a > b
* Greater than or equal to: a >= b

These conditions can be used in several ways, most commonly in "if statements" and loops.

An "if statement" is written by using the if keyword.

**Flowchart:**

**Program:**

Num = int(input("Enter the number: "))

highest = int(input("Enter the highest range of the number: "))

for i in range(1,highest+1):

    if(i%Num == 0):

        print(i)

**Output/Result:**

Enter the number: 4

Enter the highest range of the number: 20

4

8

12

16

20

**Conclusion: Hence, by using for loop and if condition we have** Printed all Numbers in a Range Divisible by a Given Number