Sample Program 8  
•Write a program to find whether the given number is PRIME or NOT.   
Ex : Input : n = 23  
Output : PRIME NUMBER  
  
Sample Program 8  
n=int(input("Enter a number : "))  
i=1  
count=0  
while n>=i:  
if n%i==0:  
count=count+1  
i=i+1   
if count==2:  
print("PRIME NUMBER")  
else:  
print("NOT A PRIME NUMBER")  
  
Sample Program 9  
•Write a program to display the multiplication table for the number   
entered by the user.   
Ex : Input : n = 2  
Output : 2 \* 1 = 2  
2 \* 2 = 4  
2 \* 3 = 6  
“ “ “ “  
2 \* 10 = 20  
  
Sample Program 9  
n=int(input("Enter the table number : "))  
i=1  
while i<=10:  
print(n," \* ", i, " = ", n\*i)  
i=i+1  
  
Sample Program 10  
•Write a program to display the staircase model based on the number of   
rows entered by the user.   
Ex : Input : n = 5  
Output :   
\* \* \* \* \*  
\* \* \* \*  
\* \* \*  
\* \*  
\*  
n=int(input("Enter no. of rows : "))  
i=1  
while n>=1:  
print("\* "\*n)  
n=n-1  
  
Range function  
•The range() function returns a sequence of numbers, starting from 0 by   
default and increments by 1 by default and stops before the specified   
number. The syntax of range function is  
range(begin, end, step)  
•Begin -first value in the range; if omittedthe default value is 0  
•End -one past the last value in the range; end value may not be   
omitted  
•Step -the amount of increment, if omitted the default increment is 1  
•Begin, End and Step valuesmust be integers, floating values and other   
values are not allowed.  
  
Range function  
range(10) 0,1,2,3,4,5,6,7,8,9  
range(1, 10) 1,2,3,4,5,6,7,8,9  
range(1, 10, 2) 1,3,5,7,9  
range(10, 0, -1) 10,9,8,7,6,5,4,3,2,1  
range(10, 0, -2) 10,8,6,4,2  
range(2, 11, 2) 2,4,6,8,10  
range(-5, 5) −5,−4,−3,−2,−1,0,1,2,3,4  
range(1, 2) 1  
range(1, 1) (empty)  
range(1, -1) (empty)  
range(1, -1, -1) 1,0  
range(0) (empty)  
  
For loop statement  
•The for loop in Python is used to iterate over a sequence (list, tuple,   
strubg) or other iterableobjects. The syntax of range function is  
for Val in Sequence:  
Statement(s)  
•Val -is the variable that takes the value of the item inside the   
sequenceon each iteration.  
•Loopcontinuesuntilwereachthelastiteminthesequence.The  
statement(s)offorloopisseparatedfromtherestofthecodeusing  
indentation.  
  
Forloop statement  
  
For loop statement  
•For loop with range function examples  
n=range(1, 10)  
for iin n:  
print(i, end=' ')  
for iin range(0, 10, 2):  
print(i, end=' ')  
for iin range(1,10,2):  
print(i, end=' ')  
  
Sample Program 11  
•Write a program to display either EVEN or ODD numbers based on the   
user input using for loop. Display the numbers in the same line.   
Ex : Input : n = 10 , Even = Yes/No  
Output : 2 4 6 8 10  
n=int(input("Enter a number :"))  
d=int(input("Enter 0 for EVEN, 1 for ODD :"))  
for iin range(0, n+1):  
if d==0:  
if i%2==0:  
print(i, end=' ')  
else:  
if i%2==1:  
print(i, end=' ')  
  
Sample Program 12  
•Write a program to display first N PRIME numbers based on the user   
input. Display the numbers in the same line.   
Ex : Input : n = 6   
Output : 2 3 5 7 11 13  
  
Sample Program 12  
n=int(input("Enter no. of PRIME NUMBERS to display : "))  
i=1;a=1  
while i<=n:  
j=1; count=0  
while j<=a:  
if a%j==0:  
count=count+1  
j=j+1  
if count==2:  
print(a, end=' ')  
i=i+1  
a=a+1  
  
Sample Program 12  
•Write a program to display first N Fibonaciinumbers based on the user   
input. Display the numbers in the same line.   
Ex : Input : n = 7  
Output : 0 1 1 2 3 5 8  
n=int(input("Enter no. of PRIME NUMBERS to display : "))  
num1=0;num2=1;sum=0;i=1  
while i<=n:  
print(num1)  
sum=num1+num2  
num2=num1  
num1=sum  
i=i+1