1.Write a python program to test a given number is prime or not?

```
Num = 11
# If given number is greater than 1
If num > 1:
   # Iterate from 2 to n / 2
   For I in range(2, int(num/2)+1):
      # If num is divisible by any number between
      # 2 and n / 2, it is not prime
      If (num % i) == 0:
         Print(num, “is not a prime number”)
         Break
   Else:
      Print(num, “is a prime number”)
Else:
   Print(num, “is not a prime number”)
```

Output

```
11 is a prime number
```

2.Write a program to generate odd number from m to n using while loop?

```
Maximum = int(input(“ Please Enter the Maximum Value : “))


Number = 1


While number <= maximum:
   If(number % 2 != 0):
      Print(“{0}”.format(number))
   Number = number + 1
```

Output:

```
 Please Enter the Maximum Value : 15
1
3
5
7
9
11
13
15
```

3.Write a python program to display prime number series upto given numbers

```
Lower = 900
Upper = 1000
Print(“Prime numbers between”, lower, “and”, upper, “are:”)
For num in range(lower, upper + 1):
  # all prime numbers are greater than 1
  If num > 1:
     For I in range(2, num):
        If (num % i) == 0:
           Break
     Else:
        Print(num)
```

Output:

Prime numbers between 900 and 1000 are:

907

911

919

929

937

941

947

953

967

971

977

983

991

997

4.Write a python program to generate Fibonacci series

```
# check if the number of terms is valid
If nterms <= 0:
  Print(“Please enter a positive integer”)
# if there is only one term, return n1
Elif nterms == 1:
  Print(“Fibonacci sequence upto”,nterms,”:”)
  Print(n1)
# generate fibonacci sequence
Else:
  Print(“Fibonacci sequence:”)
  While count < nterms:
     Print(n1)
     Nth = n1 + n2
     # update values
     N1 = n2
     N2 = nth
     Count += 1
```

Output:

```
How many terms? 7
Fibonacci sequence:
0
1
1
2
3
5


8
```