**Full Stack Web Development using Python**

**Assignment – 12 : More on loop**

1. Write a python script to reverse a number.

**Program :**

n=int(input("Enter a number "))

rev=0

while n:

rem=n%10

rev=rev\*10+rem

n=int(n/10)

print("Reverse of number is ",rev)

1. Write a python script to check whether a given number is Prime or not

**Program :**

n=int(input("Enter a number "))

i=2

while i<=n:

if int(n%i)==0:

break

i+=1

if i==n:

print("Prime number")

else:

print("Not Prime number")

1. Write a python script to print all Prime numbers under 100

**Program :**

for n in range(1,101):

for i in range(2,n):

if n%i==0:

break

else:

print(n,end=" ")

1. Write a python script to print all Prime numbers between two given numbers (both values inclusive)

**Program :**

a,b=int(input("Enter two numbers")),int(input())

for n in range(a+1,b):

for i in range(2,n):

if n%i==0:

break

else:

print(n,end=" ")

1. Write a python script to find next prime number of a given number

**Program :**

n=int(input("Enter a numbers"))

count=0

while 1:

n+=1

for i in range(2,n):

if n%i==0:

break

else:

print(n)

break

1. Write a python script to print first N prime numbers

**Program :**

count=int(input("Enter a numbers"))

n=1

while 1:

n+=1

for i in range(2,n):

if n%i==0:

break

else:

print(n,end=" ")

count-=1

if count==0:

break

1. Write a python script to check whether a given pair of numbers are co-Prime numbers or not.

**Program :**

n1,n2=int(input("Enter two numbers")),int(input())

x=n1 if n1>n2 else n2

fact=1

for i in range(2,x):

if i<=n1 or i<=n2:

if n1%i==0 and n2%i==0:

fact=i

print("Co-prime Numbers" if fact==1 else "Not Co-prime Numbers")

1. Write a python script to print first N terms of a Fibonacci series

**Program :**

n=int(input("Enter a numbers"))

a=-1

b=1

while n:

f=a+b

print(f,end=" ")

a=b

b=f

n-=1

1. Write a python script to calculate LCM of two numbers

**Program :**

n1,n2=int(input("Enter two numbers")),int(input())

x=n1 if n1>n2 else n2

hcf=1

for i in range(2,x):

if i<=n1 or i<=n2:

if n1%i==0 and n2%i==0:

hcf=i

lcm=int((n1\*n2)/hcf)

print("LCM is {}".format(lcm))

1. Write a python script to calculate HCF of two numbers

**Program :**

n1,n2=int(input("Enter two numbers")),int(input())

x=n1 if n1>n2 else n2

hcf=1

for i in range(2,x):

if i<=n1 or i<=n2:

if n1%i==0 and n2%i==0:

hcf=i

print("HCF is {}".format(hcf))