#### **Programming Assignment\_3**

1. Write A Python Program To Check If A Number Is Positive, Negative Or Zero?
2. Write A Python Program To Check If A Number Is Odd Or Even ?
3. Write A Python Program To Check Leap Year?
4. Write A Python Program To Check Prime Number?
5. Write A Python Program To Print All Prime Numbers In An Interval Of 1-10000?

Q 1: Write A Python Program To Check If A Number Is Positive, Negative Or Zero?

Solution :

**Def check\_num(num):  
 if num > 0:  
 return "Positive Number"  
 elif num < 0:  
 return "Negative Number"  
 else:  
 return "Number is Zero"  
   
print(check\_num(9))**

Q 2 : Write A Python Program To Check If A Number Is Odd Or Even ?

Solution :

**Def check\_num(num):  
 if num%2 == 0:  
 return "Even Number"  
 else:  
 return "Odd Number"  
   
print(check\_num(46))**

Q 3: Write A Python Program To Check Leap Year?

Solution :

**Def check\_year(year):  
 if year%4 == 0:  
 return "Leap Year"  
 else:  
 return "Not Leap Year"  
   
print(check\_year(1826))**

Q 4: Write A Python Program To Check Prime Number?

Solution :

**Def check\_prime(num):  
 for i in range(3, num):  
 if num % i == 0:  
 return "Not prime Number"  
 return "Prime Number"  
   
print(check\_prime(13))**

Q 5: Write A Python Program To Print All Prime Numbers In An Interval Of 1-10000?  
solution :

**def check\_prime(num):  
 for i in range(1, num):  
 prime = True  
 if i == 1:  
 prime = False  
 else:  
 for j in range(2, i):  
 if (i % j == 0):  
 prime = False  
 if prime:  
 yield i  
   
for i in check\_prime(13):  
 print(i)**