Assignment No.4

Q1.

```
#WAP to print all even numbers until n.
num=int(input("Enter number:"))
n=1
while(n<=num):
    if(n%2==0):
        print(n)
    n=n+1
```

Q2.

```
#WAP to print all odd numbers until n.
num=int(input("Enter number:"))
n=1
while(n<=num):
    if(n%2!=0):
        print(n)
    n=n+1
```

Q3.

```
#WAP to print sum of series upto n.
n=int(input("Enter number:"))
sum=0
i=1
while(i<=n):
    sum=sum+i
    i=i+1
print("Sum:",sum)
```

Q4.

```
#WAP to print factorial of number
num=int(input("Enter a number:"))
fact=1
i=1
while(i<=num):
    fact=fact*i
    i=i+1
print(fact)
```

Q5.

```
#WAP to print fibonacci series upto n
num=int(input("Enter if you want to print numbers:"))
a=-1
b=1
for i in range(1,num+1):
    c=a+b
    print(c , end = ' ')
    a=b
    b=c
```

Q6.

```
#WAP to check if a given number is prime number or not
num = int(input("Enter number:"))
for i in range(2,num//2+1):
    if(num % i == 0):
        print("Not a prime")
        break
else:
    print("Prime")
```

Q7.

```
#WAP to check if given number is perfect number
num=int(input("Enter number:"))
sum=0
i=1
while(i<num):
    if(num%i==0):
        sum=sum+i
    i=i+1
if(sum==num):
    print("Number is perfect",num)
else:
    print("Number is not perfect",num)
```

Q8.

```
#WAP to check if given number is strong number
n=int(input("Enter number:"))
temp=n
sum=0
while(n>0):
    d=n%10
    fact=1
    #print("digit",d)
    for i in range(1,d+1):
        fact=fact*i
    #print("factorial",fact)
    sum=sum+fact
    #print("sum",sum)
    n=n//10
if(temp==sum):
```

```
    print(f'{sum} Number is strong')
else:
    print(f'{sum} Number is not strong')
```

Q9.

```
#WAP to print armstrong number within a given range
start=int(input("Enter start number:"))
end=int(input("Enter end number:"))
for num in range(start,end+1):
    sum=0
    temp=num
    while(temp>0):
        d=temp%10
        sum=sum+d**3
        temp=temp//10
    if(num==sum):
        print(f'{num} It is an armstrong number')
    else:
        print(f'{num} It is not armstrong number')
```

Q10.

```
#WAP to print all numbers in a range divisible by a given number
start_num=int(input("Enter number..."))
end_num=int(input("Enter number..."))
div_num=int(input("Enter the number should be divided by..."))
for i in range(start_num,end_num+1):
    if(i%div_num==0):
        print(i)
    i=i+1
```

Q11.

```
#WAP to print all integers upto n that aren't divisible by 2 and 3
start_num=int(input("Enter number..."))
i=1
while(i<=1):
    if(start_num%2!=0):
        print("number is not divisible by 2")
    else:
        print("number is divisible by 2")
    if(start_num%3!=0):
        print("number is not divisible by 3")
    else:
        print("number is divisble by 3")
    i=i+1
```

Q12.

```
#WAP to find which numbers are divisible by 7 and multiple of 5 in a given range
lower_num=int(input("Enter number..."))
upper_num=int(input("Enter number..."))
for i in range(lower_num,upper_num+1):
    if(i%7==0 and i%5==0):
        print(f"{i} Number is divisible by 7 and 5")
    else:
        print(f"{i} Number is not divisible by 7 and 5")
```