Assignment-7

1. **Write a Python program that prints the numbers from 1 to 10 using a for loop.**

```
ANS: for i in range(1, 11):
         print(i)
```

2.Write a Python program that prints the sum of the first n natural numbers, where n is given by the user.

```
Ans: n = int(input("Enter a number: "))
for i in range(1,n+1):
  print(i)
```

3.Write a Python program that prints the factorial of a given number n, where n is given by the user.

```
Ans: n = int(input("Enter a number: "))
factorial = 1
for i in range(1, n + 1):
    factorial *= i
print("the factorial n is: ",factorial)
```

4. Write a Python program that prints all the even numbers from 2 to 20 using a for loop.

```
Ans: for num in range(2, 21, 2):
    print(num)
```

5. Write a Python program that prints the multiplication table of a given number n, where n is given by the user.

```
Ans: n = int(input("Enter a number to print the
multiplication table: "))
for i in range(1, 11):
  a=1
  a=n*i
  print(a)
```

6. Write a Python program that prints the Fibonacci sequence up to a given number n, where n is given by the user.
Ans:

7. Write a Python program that prints the number of vowels in a given string s, where s is given by the user.

Ans:
```python
S=input("Enter a string: ")
vowels='aeioUAEIOU'
count=0
for i in S:
    if i in vowels:
        count+=1
print("Number of Vowels: ",count)
```
8. Write a Python program that prints the reverse of a given string s, where s is given by the user.

Ans:
```python
s = input("Enter a string: ")
print(s[::-1])
```

9.Write a Python program that prints whether a given string s, where s is given by the user, is a palindrome or not

10. Write a Python program that prints the number of words in a given sentence s, where s is given by the user.

11.Write a Python program that prints the largest and smallest elements in a given list l, where l is given by the user.