12.1.25

PXYT.zip

Experiment No:- 7

1 write a program to create a list containing natural numbers from m to n where m and n given input. (creat using for loop). Find the sum, average, largest and smallest in the list.
Create another list which contains all the members of 1st list expert numbers ~~divide~~ divisible by 3.

2 write a program to generate all prime numbers within a given range from m to n.

3 write a program to create a string which contains a paragraph. Now find:
(i) count how many words it contains
(ii) How many palindrome exist
(iii) print each word in reverse order.

Answer

1
```
m=int(input("Enter the starting of the natural number:-"))
n=int(input("Enter the ending of the natural number:-"))
l=[x for x in range(m,n+1)]
print("The sum of the list is:-",sum(l))
print("The average of the list is:-",(sum(l)/len(l)))
print("The largest element in the list is:-",max(l))
print("The smallest element in the list is:-",min(l))
l2=[x for x in l if x%3!=0]
print("The element which are not divisible by 3 are:-",l2)
```

Output:-
Enter the starting of the natural number :- 3
Enter the ending of the natural number :- 20
The sum of the list is :- 207
The average of the list is :- 11.5
The largest element in the list is :- 20
The smallest element in the list is :- 3
The element which are not divisible by3 are :- [4, 5, 7, 8, 10, 11, 13, 14, 16, 17, 19, 20]

2
```
m = int(input("Enter the starting of the natural number :-"))
n = int(input("Enter the ending of the natural number :-"))
for i in range(m, n+1):
    for j in range(2, i):
        if i % j == 0:
            break
    else:
        print(i, end=" ")
```

Output:-
Enter the starting of the natural number :- 2
Enter the ending of the natural number :- 10
The prime numbers are :- 2, 3, 5, 7,

3
```
inP = input("Enter a Paragraph :-")
l = inP.split()
print("The Paragraph contains", len(l), "words.")
count = 0
for i in l:
    if i == i[::-1]:
        count += 1
print("Palindrome =", count)
print("Printing the words in reversed order :-")
for i in l:
    print(i[::-1])
```

Output :-

```
Enter a Paragraph :- level civic
The Paragraph contains 2 words.
Palindrome = 2
Printing the words in reversed order :-
level
civic
```