```
#1 Write a python program to find the maximum from list of numbers.

list_1 = [42,54,58,21,9,84,98,321,1]

print("The list: {0}\n".format(list_1))

print("The maximum value in the given list is: {0} \n".format(max(list_1)))
```

Output:

import sys; print('Python %s on %s' % (sys.version, sys.platform))

sys.path.extend(['D:\\CODING\\PYTHON', 'D:/CODING/PYTHON'])

PyDev console: starting.

Python 3.9.4 (tags/v3.9.4:1f2e308, Apr 6 2021, 13:40:21) [MSC v.1928 64 bit (AMD64)] on win32

runfile('D:/CODING/PYTHON/venv/program12.py', wdir='D:/CODING/PYTHON/venv')

The list: [42, 54, 58, 21, 9, 84, 98, 321, 1]

The maximum value in the given list is: 321

```
#2 Python Program to print all prime Numbers in an Interval.

low = int(input('Please enter the lower limit for the range(The lower limit
```

```
should be greater than or equal to 2): '))
while low<2:
    print('Invalid input!!!\n')
    low = int(input('Please enter the lower limit for the range(The lower
limit should be greater than or equal to 2): '))
upper = int(input('Please enter the upper limit for the range: '))


for number in range(low,upper+1):
    if number>1:
        for p in range(2, number):
            if (number % p) == 0:
                break
        else:
            print(number)
```

Output:

import sys; print('Python %s on %s' % (sys.version, sys.platform))

sys.path.extend(['D:\\CODING\\PYTHON', 'D:/CODING/PYTHON'])

PyDev console: starting.

Python 3.9.4 (tags/v3.9.4:1f2e308, Apr 6 2021, 13:40:21) [MSC v.1928 64 bit (AMD64)] on win32

runfile('D:/CODING/PYTHON/venv/program12.py', wdir='D:/CODING/PYTHON/venv')

Please enter the lower limit for the range(The lower limit should be greater than or equal to 2): >? 2

Please enter the upper limit for the range: >? 150

2

3

5

7

11

13

17

19

23

29

31

37

41

43

47

53

59

61

67

71

73

79

83

89

97

101

103

107

109

113

127

131

137

139

149

```python
#3 Python program to find the factorial of number.

num = int(input("Enter a number: "))

factorial = 1

if num < 0:
```

```
   print("Sorry, factorial does not exist for negative numbers")
elif num == 0:
   print("The factorial of 0 is 1")
else:
   for i in range(1,num + 1):
       factorial = factorial*i
   print("The factorial of",num,"is",factorial)
```

Output:

import sys; print('Python %s on %s' % (sys.version, sys.platform))

sys.path.extend(['D:\\CODING\\PYTHON', 'D:/CODING/PYTHON'])

PyDev console: starting.

Python 3.9.4 (tags/v3.9.4:1f2e308, Apr 6 2021, 13:40:21) [MSC v.1928 64 bit (AMD64)] on win32

runfile('D:/CODING/PYTHON/venv/program12.py', wdir='D:/CODING/PYTHON/venv')

Enter a number: >? 5

The factorial of 5 is 120

```
#4 Python program to find number divisible by another number.

num1 = int(input('Please enter the dividend: '))
num2 = int(input('Please enter the divisor: '))

if num1 % num2 == 0:
    print('The number {0} is divisible by {1}.'.format(num1,num2))
else:
    print('The number {0} is not divisible by {1}.'.format(num1, num2))
```

Output:

import sys; print('Python %s on %s' % (sys.version, sys.platform))

sys.path.extend(['D:\\CODING\\PYTHON', 'D:/CODING/PYTHON'])

PyDev console: starting.

Python 3.9.4 (tags/v3.9.4:1f2e308, Apr 6 2021, 13:40:21) [MSC v.1928 64 bit (AMD64)] on win32

runfile('D:/CODING/PYTHON/venv/program12.py', wdir='D:/CODING/PYTHON/venv')

Please enter the dividend: >? 78

Please enter the divisor: >? 24

The number 78 is not divisible by 24.

```
#5 Python program to find factors of Numbers.

num = int(input('Please enter a positive integer: '))

print("The factors of",num,"are:")
for i in range(1, num + 1):
    if num % i == 0:
        print(i)
```

Output:

import sys; print('Python %s on %s' % (sys.version, sys.platform))

sys.path.extend(['D:\\CODING\\PYTHON', 'D:/CODING/PYTHON'])

PyDev console: starting.

Python 3.9.4 (tags/v3.9.4:1f2e308, Apr 6 2021, 13:40:21) [MSC v.1928 64 bit (AMD64)] on win32

runfile('D:/CODING/PYTHON/venv/program12.py', wdir='D:/CODING/PYTHON/venv')

Please enter a positive integer: >? 5

The factors of 5 are:

1

5

```
#6 Python program to find Those Numbers which are divisible by 7 and
Multiple of 5 in Given range of numbers.

lower = 1
upper = 150

for num in range(lower, upper):
    if (num%7==0) and (num%5==0):
        print(num)
```

Output:

import sys; print('Python %s on %s' % (sys.version, sys.platform))

sys.path.extend(['D:\\CODING\\PYTHON', 'D:/CODING/PYTHON'])

PyDev console: starting.

Python 3.9.4 (tags/v3.9.4:1f2e308, Apr 6 2021, 13:40:21) [MSC v.1928 64 bit (AMD64)] on win32

runfile('D:/CODING/PYTHON/venv/program12.py', wdir='D:/CODING/PYTHON/venv')

35

70

105

140

```
#7 Python program to check if a date is valid and print the incremented
date if it is. ( Using elif )
date=input("Enter the date: ")
dd,mm,yy=date.split('/')
dd=int(dd)
mm=int(mm)
yy=int(yy)
if(mm==1 or mm==3 or mm==5 or mm==7 or mm==8 or mm==10 or mm==12):
    max1=31
elif(mm==4 or mm==6 or mm==9 or mm==11):
    max1=30
elif(yy%4==0 and yy%100!=0 or yy%400==0):
    max1=29
else:
    max1=28
if(mm<1 or mm>12):
    print("Date is invalid.")
elif(dd<1 or dd>max1):
    print("Date is invalid.")
elif(dd==max1 and mm!=12):
    dd=1
    mm=mm+1
    print("The incremented date is: ",dd,mm,yy)
elif(dd==31 and mm==12):
    dd=1
```

```
    mm=1
    yy=yy+1
    print("The incremented date is: ",dd,mm,yy)
else:
    dd=dd+1
    print("The incremented date is: ",dd,mm,yy)
```

Output:

import sys; print('Python %s on %s' % (sys.version, sys.platform))

sys.path.extend(['D:\\CODING\\PYTHON', 'D:/CODING/PYTHON'])

PyDev console: starting.

Python 3.9.4 (tags/v3.9.4:1f2e308, Apr 6 2021, 13:40:21) [MSC v.1928 64 bit (AMD64)] on win32

runfile('D:/CODING/PYTHON/venv/program12.py', wdir='D:/CODING/PYTHON/venv')

Enter the date: >? 29/05/2021

The incremented date is: 30 5 2021

```
#8 Python program to display even numbers between m and n.

m = int(input('Please enter the value of m: '))
n = int(input('Please enter the value of n: '))

for i in range(m,n+1):
    if i % 2 == 0:
        print(i)
```

Output:

import sys; print('Python %s on %s' % (sys.version, sys.platform))

sys.path.extend(['D:\\CODING\\PYTHON', 'D:/CODING/PYTHON'])

PyDev console: starting.

Python 3.9.4 (tags/v3.9.4:1f2e308, Apr 6 2021, 13:40:21) [MSC v.1928 64 bit (AMD64)] on win32

runfile('D:/CODING/PYTHON/venv/program12.py', wdir='D:/CODING/PYTHON/venv')

Please enter the value of m: >? 5

Please enter the value of n: >? 28

6

8

10

12

14

16

18

20

22

24

26

28

```
#9 python program to add natural numbers up to n i.e 1+2+3+4....n.

num = int(input("Enter the value of n: "))
hold = num
sum = 0

if num <= 0:
   print("Enter a whole positive number!")
else:
   while num > 0:
         sum = sum + num
         num = num - 1;
    print("Sum of first", hold, "natural numbers is: ", sum)
```

Output:

import sys; print('Python %s on %s' % (sys.version, sys.platform))

sys.path.extend(['D:\\CODING\\PYTHON', 'D:/CODING/PYTHON'])

PyDev console: starting.

Python 3.9.4 (tags/v3.9.4:1f2e308, Apr 6 2021, 13:40:21) [MSC v.1928 64 bit (AMD64)] on win32

runfile('D:/CODING/PYTHON/venv/program12.py', wdir='D:/CODING/PYTHON/venv')

Enter the value of n: >? 5

Sum of first 5 natural numbers is: 15

```
#10 Python program to display each character from a string using sequence
index.

s = 'Navrachana'
for i in range(len(s)):
    print (s[i])
```

Output:

import sys; print('Python %s on %s' % (sys.version, sys.platform))

sys.path.extend(['D:\\CODING\\PYTHON', 'D:/CODING/PYTHON'])

PyDev console: starting.

Python 3.9.4 (tags/v3.9.4:1f2e308, Apr 6 2021, 13:40:21) [MSC v.1928 64 bit (AMD64)] on win32

runfile('D:/CODING/PYTHON/venv/program12.py', wdir='D:/CODING/PYTHON/venv')

N

a

v

r

a

c

h

a

n

a