Assignment No 7 : (Functions)

Aim: Write a Python function to -

- find the Max of three numbers
- multiply all the numbers in a list
- create a list of all even numbers between 19 and 88
- display the current date and time and get the Python version

Theory: In Python, a function is a group of related statements that performs a specific task. Functions help break our program into smaller and modular chunks. As our program grows larger and larger, functions make it more organized and manageable. Furthermore, it avoids repetition and makes the code reusable.

Syntax:

```
def function_name(parameters):
    """docstring"""
    statement(s)
```

CODE(a):

```
# Write a Python function to -
# • find the Max of three numbers

def Max_Of_Three():
    a,b,c = [int(x) for x in input("Enter three numbers: ").split(" ")]
    if a>b and a>c:
        print(f"{a} is greater than both {b} and {c}")
    elif b>a and b>c:
        print(f"{b} is greater than both {a} and {c}")
    elif c>a and c>b:
        print(f"{c} is greater than both {b} and {a}")

Max_Of_Three()
```

OUTPUT:

```
C:\Users\soura\AppData\Local\Microsoft\WindowsApps\pythonw3.10.exe
Enter three numbers: 2 3 6
6 is greater than both 3 and 2

Process finished with exit code 0
```

CODE(b):

```
# • multiply all the numbers in a list

def Mul_Of_List():
    list1 = []
    n = int(input("Enter the total number of elements in list: \n"))
    for ele in range(n):
        ele = int(input("Enter the element: "))
        list1.append(ele)
    mul = 1
    for i in list1:
        mul = mul*i
    print("Multiplication of elements in list: ", mul)
Mul_Of_List()
```

OUTPUT:

```
C:\Users\soura\AppData\Local\Microsoft\WindowsApps\pythonw3.10.exe "C:/SOURAV/CODE/Python codes
Enter the total number of elements in list:

4

Enter the element: 1

Enter the element: 2

Enter the element: 3

Enter the element: 4

Multiplication of elements in list: 24

Process finished with exit code 0
```

CODE(c):

```
def even_in_19_88():
    list2 = []
    for i in range(19,89):
        if i%2==0:
            list2.append(i)
        print(list2)
even_in_19_88()
```

OUTPUT:

```
C:\Users\soura\AppData\Local\Microsoft\WindowsApps\pythonw3.10.exe "C:/SOURAV/CODE/Python codes/Python Assignment/Assignment7.py"

[20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88]

Process finished with exit code 0
```

CODE(d):

```
# • display the current date and time and get the Python version
from datetime import datetime
def date_time():
    now = datetime.now()
    print("now =", now)
date_time()
```

OUTPUT:

```
C:\Users\soura\AppData\Local\Microsoft\WindowsApps\pythor
now = 2022-10-03 10:14:02.236692
Process finished with exit code 0
```

Conclusion: Hence, we have learned the implementation of Functions.