DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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WORKSHEET 1.3

NAME – SABHYA MAHAJAN	UID – 21BCS9200
DATE – 23/02/23	SUBJECT – PYTHON
SECTION – 21BCS801-A	SEM – 4TH

Aim:

1. Write a python program to calculate area of 10 different circles. Given the pie = 22/7 and radius of the circles entered by user using Simple Function, Parameterized Function, Return Type with function and return type with parameterized Functions.
2. Write a python program to print Multiplication tables from 2 to 20 whether table values entered by user using Simple Function, Parameterized Function, Return Type with function and return type with parameterized Functions.

❖ PROGRAM 1

Source Code:

```
print("Name - SABHYA MAHAJAN, UID - 21BCS9200")
def area(r, pi=3.14):
    return pi * r * 2
def circle():
    for i in range(1, 11):
        print("Enter the radius of circle", i, ":")
        rad = int(input())
        print("The area of circle", i, "is:", area(rad))
        print()
circle()
```

Output:

```
PS C:\Users\lenovo\OneDrive\Desktop\PRO\Python> & C:/Users/lenovo/AppData
/Local/Programs/Python/Python311/python.exe c:/Users/lenovo/OneDrive/Desk
top/PRO/Python/first.py
Name - SABHYA MAHAJAN, UID - 21BCS9200
Enter the radius of circle 1 :
10
The area of circle 1 is: 62.800000000000004

Enter the radius of circle 2 :
25
The area of circle 2 is: 157.0

Enter the radius of circle 3 :
5
The area of circle 3 is: 31.400000000000002

Enter the radius of circle 4 :
6
The area of circle 4 is: 37.68

Enter the radius of circle 5 :
3
The area of circle 5 is: 18.84

Enter the radius of circle 6 :
2
The area of circle 6 is: 12.56

Enter the radius of circle 7 :
50
The area of circle 7 is: 314.0

Enter the radius of circle 8 :
8
The area of circle 8 is: 50.24

Enter the radius of circle 9 :
9
The area of circle 9 is: 56.52

Enter the radius of circle 10 :
15
The area of circle 10 is: 94.2

PS C:\Users\lenovo\OneDrive\Desktop\PRO\Python>
```

- **PROGRAM 2**

Source code:

```
print("Name - SABHYA MAHAJAN, UID - 21BCS9200")
def printTable(num):
    for i in range(1, 11):
        print(num, " x ", i, " = ", num * i)
n = int(input("Please Enter a number to print its multiplication table: "))
printTable(n)
```

Output:

```
PS C:\Users\lenovo\OneDrive\Desktop\PRO\Python> & C:/Users/lenovo/AppData/Local/Programs/P
ython/Python311/python.exe c:/Users/lenovo/OneDrive/Desktop/PRO/Python/first.py
Name - SABHYA MAHAJAN, UID - 21BCS9200
Please Enter a number to print its multiplication table:15
15  x  1  =  15
15  x  2  =  30
15  x  3  =  45
15  x  4  =  60
15  x  5  =  75
15  x  6  =  90
15  x  7  =  105
15  x  8  =  120
15  x  9  =  135
15  x  10  =  150
PS C:\Users\lenovo\OneDrive\Desktop\PRO\Python>
```