Experiment No. 1

Name : Mirza Zufiqar Ali Jaffer Ali
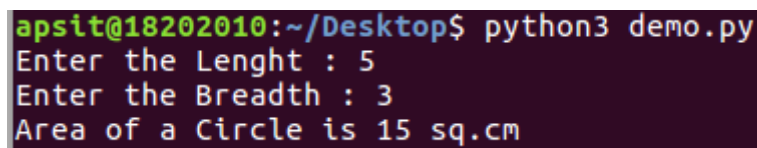**Moodle Id :** 18102043
Roll No. : 32
Subject : OSTL

Codes ::

1)

```
lenght = int(input("Enter the Lenght : "))
breadth = int(input("Enter the Breadth : "))
area = lenght * breadth
print(f"Area of a Circle is",area,"sq.cm")
```
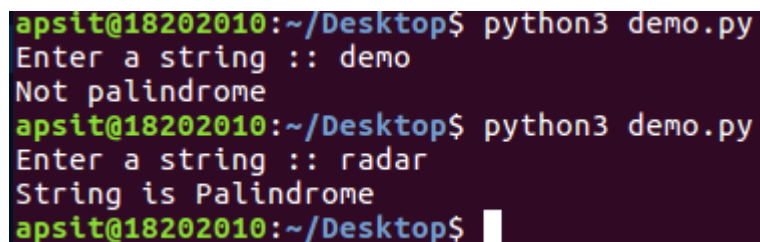
Output ::

```
apsit@18202010:~/Desktop$ python3 demo.py
Enter the Lenght : 5
Enter the Breadth : 3
Area of a Circle is 15 sq.cm
```

2)

```
s1 = input("Enter a string :: ")
if(s2 == s1[::-1]):
     print("String is Palindrome")
else:
     print("Not palindrome")
```

Output ::

```
apsit@18202010:~/Desktop$ python3 demo.py
Enter a string :: demo
Not palindrome
apsit@18202010:~/Desktop$ python3 demo.py
Enter a string :: radar
String is Palindrome
apsit@18202010:~/Desktop$
```

3)

```
arr = [23, 45, 7, 2, 5, 10, 407]
for i in arr :
     if(i%2 == 0):
          print(f"{i} is Even Number")
```

```
        else:
                print(f"{i} is Odd Number")
                if(i>1):
                        for j in range(2, i//2):
                                if (i % j) == 0:
                                        print(f"{i} is not a Prime Number")
                                        break
                        else:
                                print(f"{i} is a Prime Number")
```

Output ::

```
zulfiqar110@zulfiqar110-HP-ProBook-6470b:~/Desktop$ python3 demo.py
23 is Odd Number
23 is a Prime Number
45 is Odd Number
45 is not a Prime Number
7 is Odd Number
7 is a Prime Number
2 is Even Number
5 is Odd Number
5 is a Prime Number
10 is Even Number
407 is Odd Number
407 is not a Prime Number
```

4)

```
s1 = input("Enter a String :: ")
length = len(s1)
print(f"Length of the given string is {length}")

if(length>=3):
        if("ing" in s1):
                print(s1.replace("ing","ly"))

        else:
                print(f"{s1}ing")
else :

print(s1)
```

Output ::

```
zulfiqar110@zulfiqar110-HP-ProBook-6470b:~/Desktop$ python3 demo.py
Enter a String :: Biling
Length of the given string is 6
Billy
zulfiqar110@zulfiqar110-HP-ProBook-6470b:~/Desktop$ python3 demo.py
Enter a String :: Programm
Length of the given string is 8
Programming
zulfiqar110@zulfiqar110-HP-ProBook-6470b:~/Desktop$ python3 demo.py
Enter a String :: do
Length of the given string is 2
do
zulfiqar110@zulfiqar110-HP-ProBook-6470b:~/Desktop$
```

5)

```python
for i in range(1,51):
    a = str(i)
    if(i%4 == 0):
        print(a.replace(a,"Boundary"))
    if(i%6 == 0):
        print(a.replace(a,"In the Air"))
    if(i%3==0 and i%5==0):
        print(a.replace(a,"Helicopter Shot"))
    print(i)
```

Output ::

```
zulfiqar110@zulfiqar110-HP-ProBook-6 26
1                                     27
2                                     Boundary
3                                     28
Boundary                              29
4                                     In the Air
5                                     Helicopter Shot
In the Air                            30
6                                     31
7                                     Boundary
Boundary                              32
8                                     33
9                                     34
10                                    35
11                                    Boundary
Boundary                              In the Air
In the Air                            36
12                                    37
13                                    38
14                                    39
Helicopter Shot                       Boundary
15                                    40
Boundary                              41
16                                    In the Air
17                                    42
In the Air                            43
18                                    Boundary
19                                    44
Boundary                              Helicopter Shot
20                                    45
21                                    46
22                                    47
23                                    Boundary
Boundary                              In the Air
In the Air                            48
24                                    49
25                                    --
26
```