



Progressive Education Society's
Modern College of Engineering, Pune
MCA Department
A.Y.2023-24

(310908) Python Programming Laboratory

Class: FY-MCA

Shift / Div : B / F2

Roll Number : 51124

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Assignment No:1

Date of Implementation: 11/09/2023

Q.1 Write a Python Program for simple interest.

```
def simple_interest(p,t,r):
```

```
    print('The principal is', p)
```

```
    print('The time period is', t)
```

```
    print('The rate of interest is',r)
```

```
    si = (p * t * r)/100
```

```
    print('The Simple Interest is', si)
```

```
P = int(input("Enter the principal amount :"))
```

```
T = int(input("Enter the time period :"))
```

```
R = int(input("Enter the rate of interest :"))
```

```
simple_interest(P,T,R)
```

```
Enter the principal amount :  
1200  
Enter the time period :  
5  
Enter the rate of interest :  
7  
The principal is 1200  
The time period is 5  
The rate of interest is 7  
The Simple Interest is 420.0
```

Q.2 Write a Python Program to Swap Variables.

```
x = 60
```

```
y = 70
```

```
x = x * y
```

```
y = x / y
```

```
x = x / y
```

```
print("Value of x : ", x)
```

```
print("Value of y : ", y)
```

```
Value of x :  70.0  
Value of y :  60.0
```

Q.3 Write a Python Program to find Area of a Circle.

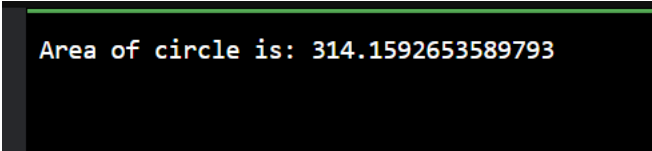
```
import math

def area(r):

    area = math.pi* pow(r,2)

    return print('Area of circle is:' ,area)

area(10)
```



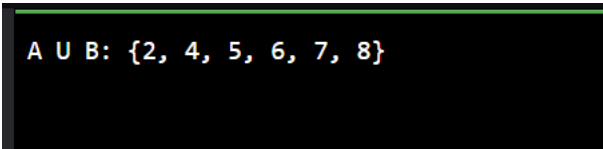
```
Area of circle is: 314.1592653589793
```

Q.4 Write a Python Program to demonstrate union of two sets .

A = {2, 4, 5, 6}

B = {4, 6, 7, 8}

```
print("A U B:", A.union(B))
```



```
A U B: {2, 4, 5, 6, 7, 8}
```

Q.5 Write a Python Program to demonstrate difference of two sets .

A = { 10, 20, 30, 40, 80 }

B = { 100, 30, 80, 40, 60 }

print (A.difference(B))

print (B.difference(A))

```
{10, 20}  
{100, 60}
```