ASSIGNMENT(MODULE 1)

1)Write python program to design simple calculator for the operators

+ Addition

- Subtraction

* multiplication

/ division

% modulus

** exponent

// floor division

a)

```
a=int(input("enter a value"))
b=int(input("enter b value"))
c=a+b
d=a-b
e=a*b
f=a/b
g=a**b
h=a%b
i=a//b
print("the sum is",c)
print("the difference is",d)
print("product is",e)
print("division is",f)
print("power is",g)
print("remainder is",h)
print("quotient is",i)
```

Output:

enter a value 8

enter b value 2

the sum is 10
the difference is 6
product is 16
division is 4.0
power is 64
remainder is 0
quotient is 4

2)Write a python program to calculate simple interest
a)p=float(input("enter the value of principle p"))
t=float(input("enter the value of time t"))
r=float(input("enter the value of rate of interest r"))
s=(p*t*r)/100
print("simple interest is",s)
Output:
enter the value of principle p 50

enter the value of time t 50

enter the value of rate of interest r 50
simple interest is 1250.0

3)Write a python program to calculate area of a circle
a)pi=3.14
r=float(input("Enter the radius of circle"))
a=pi*r*r
print("area of circle is",a)
Output:
Enter the radius of circle 5
area of circle is 78.5

4)Write a python program to calculate area of triangle
a)w=float(input("enter the width of the triangle"))

```
h=float(input("enter the height of the triangle"))
a=0.5*w*h
print("area of triangle",a)
```
Output:
enter the width of the triangle 15

enter the height of the triangle 14
area of triangle 105.0

5)Write a python program to convert temperature in celsius to fahrenheit
a)
```
c=float(input("enter the temperature in celsius"))
f=1.8*c+32
print("the temperature in fahrenheit is ",f)
```
Output:
enter the temperature in celsius 10
the temperature in fahrenheit is 50.0

6)Write a python program to calculate area of rectangle
a)
```
l=float(input("enter length of rectangle"))
b=float(input("enter breadth of rectangle"))
a=2*(l+b)
print("area of rectangle is ",a)
```
Output:
enter length of rectangle 2

enter breadth of rectangle 2
area of rectangle is 8.0

7)write a program to calculate perimeter of square
a)
```
a=float(input("enter side of square"))
p=4*a
print("perimeter of square",p)
```
Output:

```
a=float(input("enter side of square"))
p=4*a
print("perimeter of square",p)
```

8)write a python program to find circumference of circle

```
a)pi=3.14
r=float(input("enter radius of circle"))
c=pi*2*r
print("circumference of circle is",c)
```

Output:

```
enter radius of circle 2
circumference of circle is 12.56
```

9)Write a python program to swap two numbers

```
a)a=float(input("enter a value"))
b=float(input("enter b value"))
temp=a
a=b
b=temp
print("a=",a)
print("b=",b)
```

Output:

```
enter a value 3

enter b value 2
a= 2.0
b= 3.0
```