

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=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
```