# ASSIGNMENT-1 FROM MODULE-1

1.Write a python program to design simple calculator for the operators

Addition(+) Substraction(-) Multiplication(*) Division(/) Modulus(%) Exponent(**) Floor Division(//)

In [2]:

```
a=int(input("Enter value of a:"))
b=int(input("Enter value of b:"))
s=input("Enter operation:")
if s=='+':
    print("Addition of a and b:",a+b)
elif s=='-':
    print("Substraction of a and b:",a-b)
elif s=='*':
    print("Multiplication of a and b:",a*b)
elif s=='/':
    print("Division of a and b:",a/b)
elif s=='%':
    print("Modulus of a and b:",a%b)
elif s=='**':
    print("a power b:",a**b)
elif s=='//':
    print("Floor Division of a and b:",a+b)
else:
    print("Invalid choice")
```

```
Enter value of a:40
Enter value of b:20
Enter operation:/
Division of a and b: 2.0
```

2:Write a python program to calculate simple interest

In [2]:

```
p=float(input("Enter principle amount:"))
t=float(input("Enter time:"))
r=float(input("Enter rate:"))
interest=(p*t*r)/100
print("Interest:",interest)
```

```
Enter principle amount:10000
Enter time:1
Enter rate:1
Interest: 100.0
```

3:Write a python program to calculate area of circle

In [3]:

```
r=float(input("Enter radius of circle:"))
area=3.14*r*r
print("Area of circle:",area)
```

```
Enter radius of circle:4
Area of circle: 50.24
```

4:Write a python program to calculate area of triangle

In [4]:

```
b=float(input("Enter base of triangle:"))
```

```
h=float(input("Enter height of triangle:"))
area=0.5*b*h
print("Area of triangle:",area)
```

```
Enter base of triangle:4
Enter height of triangle:2
Area of triangle: 4.0
```

5:Write a python program to convert temperature from celsius to fahrenheit

In [5]:

```
c=float(input("Enter temperature in celsius:"))
f=(1.8*c)+32
print("Temperature in fahrenheit:",f)
```

```
Enter temperature in celsius:40
Temperature in fahrenheit: 104.0
```

6:Write a python program to calculate area of rectangle

In [6]:

```
l=float(input("Enter length of rectangle:"))
b=float(input("Enter breadth of rectangle:"))
area=l*b
print("Area of rectangle:",area)
```

```
Enter length of rectangle:10
Enter breadth of rectangle:20
Area of rectangle: 200.0
```

7:Write a python program to calculate perimeter of square

In [7]:

```
s=float(input("Enter side of square:"))
p=4*s
print("Perimeter of square:",p)
```

```
Enter side of square:4
Perimeter of square: 16.0
```

8:Write a python program to calculate circumference of circle

In [8]:

```
r=float(input("Enter radius of circle:"))
cir=2*3.14*r
print("Circumference of circle:",cir)
```

```
Enter radius of circle:4
Circumference of circle: 25.12
```

9:Write a python program to swap two numbers

In [9]:

```
a=float(input("Enter value of a:"))
b=float(input("Enter value of b:"))
print("Before swapping:a=",a,"b=",b)
a,b=b,a
print("After swapping:a=",a,"b=",b)
```

```
Enter value of a:10
Enter value of b:20
Before swapping:a= 10.0 b= 20.0
After swapping:a= 20.0 b= 10.0
```

In [ ]:

```
```