

```
In [14]: #1.Simple Calculator
print('enter\n1.addition\n2.subtraction\n3.multiplication\n4.division\n5.modulus\n6.exponent\n7.floor division\n')
c=input('enter your choice')
if c in ('1','2','3','4','5','6','7'):
    a=float(input('enter value 1='))
    b=float(input('enter value 2='))
    if c=='1':
        print('a+b=',a+b)
    elif c=='2':
        print('a-b=',a-b)
    elif c=='3':
        print('a*b=',a*b)
    elif c=='4':
        print('a/b=',a/b)
    elif c=='5':
        print('a%b=',a%b)
    elif c=='6':
        print('a**b=',a**b)
    elif c=='7':
        print('a//b=',a//b)
    else:
        print('invalid choice')
```

enter
1.addition
2.subtraction
3.multiplication
4.division
5.modulus
6.exponent
7.floor division

enter your choice4
enter value 1=10
enter value 2=5
a/b= 2.0

```
In [19]: #2.calculate simple intrest
p=float(input('enter the principle amount'))
t=float(input('enter the time'))
r=float(input('enter the rate'))
si= (p*t*r)/100
print('SI=',si)
```

enter the principle amount10000
enter the time2
enter the rate1
SI= 200.0

```
In [20]: #3.calculate area of circle
r=float(input('enter the radius of circle\n'))
a= 3.142*r**2
print(a)
```

enter the radius of circle
2
12.568

```
In [27]: #4.area of triangle
b=float(input('enter breath\n'))
h=float(input('enter height\n'))
a=0.5*b*h
print('\narea of triangle= ',a)
```

enter breath
3
enter height
2

area of triangle= 3.0

```
In [29]: #5.conversion of temperature from Celsius to Fahrenheit
c=float(input('enter the temperature in Celsius '))
F=(c*(9/5))+32
print('temperature in Fahrenheit is 'F)
```

enter the temperature in Celsius 27
80.6

```
In [30]: #6.area of a rectangle
l=float(input('enter the length\n'))
b=float(input('enter the breath\n'))
a=l*b
print('\narea of rectangle is ',a)
```

enter the length
2
enter the breath
2

area of rectangle is 4.0

```
In [34]: #7.perimeter of square
a=float(input('enter the length \n'))
ar=4*a
print('\nperimeter of square is ',ar)
```

enter the length
2

perimeter of square is 8.0

```
In [35]: #8.circumference of a circle
r=float(input('enter the radius\n'))
p=2*3.142*r
print('\ncircumference of circle is ',p)
```

enter the radius
2

circumference of circle is 12.568

```
In [36]: #9.swapping of 2 numbers
a=float(input('enter a \n'))
b=float(input('enter b \n'))
print('before swapping\n a= ',a,'\tb= ',b)
a,b=b,a
print('after swapping \na =',a,'\tb= ',b)
```

enter a
2
enter b
3
before swapping
a= 2.0 b= 3.0
after swapping
a = 3.0 b= 2.0

```
In [ ]:
```