1) Write a python program to design simple calculator for operations
+(addition), -(subtraction), *(Multiplication), /(division), % (Modulus), **(exponent), //(Floor division)

→

```
Print ("1. Addition")
print ("2. Subtraction")
print ("3. Multiplication")
print ("4. Division")
print ("5. Modulus")
print ("6. exponent")
print ("7. Floor division")
choice = int (input ("Enter your choice :");
if (choice >=1 and choice <=7):
    print ("Enter two numbers :");
    num1 = int (input())
    num2 = int (input())
    if choice == 1:
        res = num1 + num2
        print ("Result = ", res)
    elif choice == 2:
        res = num1 - num2
        print ("Result = ", res)
```

```
elif choice == 3 :
    res = num1 * num2
    print ("Result = ", res)
elif choice == 4 :
    res = num1 / num2
    print ("Result = ", res)
elif choice == 5 ;
    res = num1 % num2
    print ("Result = ", res)
elif choice == 6 ;
    res = num1 ** num2
    print ("Result = ", res)
elif choice == 7 ;
    res = num1 // num2
    print ("Result = ", res)
else :
    print ("Wrong input .. !!")
```

2) Write a python program to calculate simple interest

→

```
P = float(input("Enter the principal amount:"))
T = float(input("Enter the number of years:"))
R = float(input("Enter the rate of interest:"))
SI = (P*T*R)/100
print("Simple interest:{}".format(SI))
```

3) Write a python program to calculate area of circle

→

```
PI = 3.14
radius = float(input("please Enter the radius of
                     a circle:"))
area = PI * radius * radius
print("area of circle = %0.2f"%area)
```

4) Write a program to calculate area of a triangle.

→

```
a = float(input('Enter first side:'))
b = float(input('Enter second side:'))
c = float(input('Enter third side:'))
```

```
# calculate the semi-perimeter
s = (a+b+c)/2

# calculate the area
area = (s*(s-a)*(s-b)*(s-c)) ** 0.5
print('The area of the triangle is
      %0.2f'%area)
```

5) Write a python program to convert temperature in celsius to Fahrenheit.

→

```
Celsius = 37.5
fahrenheit = (celsius * 1.8) + 32
print('%0.1f degree celsius is equal to
      %0.1f degree Fahrenheit'%
      (celsius, fahrenheit))
```

6) Write a python program to calculate area of rectangle.

→

```
length = float(input('Enter the length of
                     a Rectangle:'))
width = float(input('Enter the width of
                    a Rectangle:'))
```

# calculate the area
area = length * width
print ("The area of a Rectangle =", area)

7) Write a python program to calculate perimeter of a square

→

```
s = int (input ("Enter the side : "))
area = s*s
perimeter = 4*s
print ("Area of Square : ", area)
print ("perimeter of square :", perimeter)
```

8) Write a python program to calculate circumferen -ce of circle

→

```
radius = float (input ("Enter the radius of the
                        circle : "))
circumference = 2 * math.pi * radius
print ("Circumference of circle : %.2f" % circumfe
                                        -rence)
```