1) Write a Python program to design simple calculator for the operators +(addition), -(subtraction), *(multiplication), /(division), % (modulus), ** (exponent), // (floor division)

```
num1 = int(input('Enter First number:'))
num2 = int(input('Enter Second number'))
add = num1+num2
diff = num1 - num2
mul = num1* num2
div = num1/num2
floor_div = num1//num2
power = num1**num2
modulus = num1%num2
Print('Sum of',num1,'and', num2,'is:', add)
print('Difference of', num1,'and', num2,'is:' dif)
print('Product of', num1,'and', num2,'is:' mul)
print('Division of', num1,'and', num2,'is:' div)
print('Floor Division of', num1,'and', num2,'is:', floor_div)
print('Exponent of', num1,'and', num2,'is:',
Print('Modulus of', num1,'and', num2,'is:', modulus)
```

2) Write a python program to calculate simple interest.

```
P=1000
R=1
T=2
# simple interest
SI=(P*R*T)/100
Print("simple interest is",SI)
output
simple interest is 20.0
```

3) Write a python programme to calculate area of circle

```
PI =3.14
r=float(input("Enter the radius of the circle:"))
area = PI*r*r

print("Area of the circle is : %.2f"%area)
```

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

```
a=5
b=6
c=7
s=(a+b+c)/2
area = (s*(s-a)*(s-b)*(s-c))**0.5
print ('The area of the triangle is %0.2f'%area)
```

output

The area of triangle is 14.70

5) Write a python program to temperature in celcius to fahrenheit

```
celcius=37.5
fahrenheit = (celsius*1.8)+32
print ('%.1f degree Celsius is equal to %0.1f degree Fahrenheit' % (celsius, fahrenheit))
```

output

37.5 degree celsius is equal to 99.5 degree

6) Write a python program to calculate area of rectangle

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

Area = width*height
Perimeter = 2*(width+height)

Print ("\n Area of a Rectangle is:%.2f'%Area)
Print ("Perimeter of Rectangle is:%2f" %perimeter)
```

7)

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

```
Print ("Enter 'x' for exit.");
side = input ("Enter side length of square: ");
if side == 'x':
    exit();
else:
    slength = int(side);
    perimeter = 4 * slength
    Print ("In perimeter of Square: ", perimeter);
```

enter side length of square is 5
perimeter of square is 25

8) Write a python program to scalculate circumference of a circle

```
Print ("Enter 'x' for exit.");
rad = input ("Enter radius of circle:");
if rad == 'x':
    exit();
else:
    radius = float (rad);
    circumference = 2 * 3.14 * radius;
    print ("In Circumference of Circle = ", circumference);
```

9) Write a python program to swap two numbers

```
x = 5
Y = 10
temp = x
x = Y
Y = temp
print ('The value of x after swapping: {}'.format(x))
print ('The value of Y after swapping: {}'.format(Y))
```

Output

The valueof of X after swapping is 10
The valueof of Y after swapping is 5