Asignment - 2
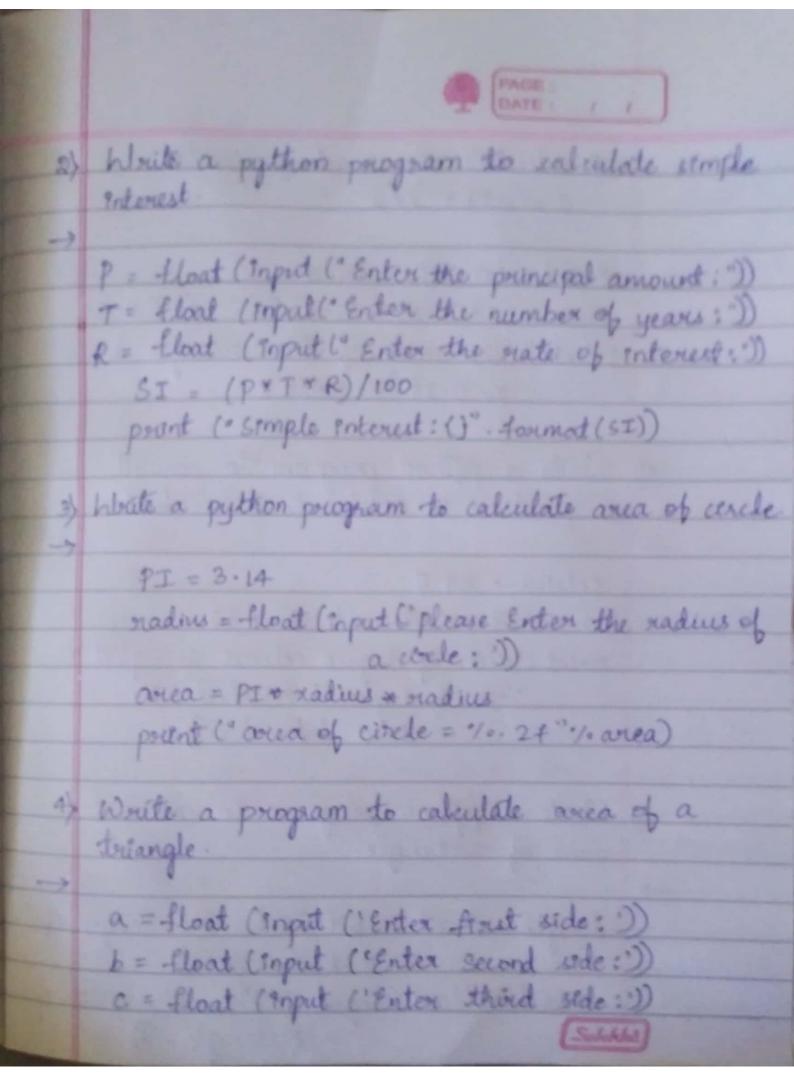
1. Write a python program to design simple calculator for operations
+ (addition), - (subtraction), * (Multiplication), / (division),
% (Modulus), ** (exponent), // (Floor division)

→

```
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 ())
        num 2 = int (input ())
        if choice == 1:
            res = num1 + num2
            print (" Result = ", res)
        elif choice == 2:
            res = num1 - num2
            print ("Result = ", res)
```

```python
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 :"))

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

7) Write a python program to calculate perimeter of a Square.

→
```python
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 circumference of circle.

→
```python
radius = float (input ("Enter the radius of the circle :"))
circumference = 2 * math.pi * radius
print ("circumference of circle : %.2f" % circumference)
```