

Assignment - 2

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

+ (addition),
- (subtraction),
* (multiplication),
/ (division),
% (modulus),
** (exponent),
// (Floor division)

A) # simple calculator

```
c = input("enter a string");  
a = int(input("enter the value of a:"))  
b = int(input("enter the value of b:"))  
if (c == '+'):  
    print(a, "+", b, ":", (a+b))  
elif (c == '-'):  
    print(a, "-", b, ":", (a-b))  
elif (c == '*'):  
    print(a, "*", b, ":", (a*b))  
elif (c == '/'):  
    print(a, "/", b, ":", (a/b))  
elif (c == '%'):  
    print(a, "%", b, ":", (a%b))  
elif (c == '//'):  
    print(a, "//", b, ":", (a//b))  
elif (c == '**'):  
    print(a, "**", b, ":", (a**b))  
else:  
    print("invalid input")
```

② write a python program to calculate simple interest.

A)

```
p = int(input("enter the value of p:"))
t = int(input("enter the value of t:"))
r = int(input("enter the value of r:"))
si = ((p * t * r) / 100)
print("simple interest :", si)
```

③ write a python program to calculate area of circle.

A)

```
r = int(input("enter the radius value:"))
area = 3.142 * r * r
print("area of circle", area)
```

④ write a python program to calculate area of triangle.

A)

```
b = float(input("enter the base"))
h = float(input("enter height"))
area_of_triangle = 0.5 * b * h.
print("area of triangle", area_of_triangle)
```

⑤ write a python program to convert the temperature from Celsius to Fahrenheit.

A)

```
c = float(input("enter the temperature value in celsius:"))
f = (1.8 * c) + 32.
print("temperature in fahrenheit :", f)
```

⑥ write a python program to calculate area of rectangle.

```
length = float(input("enter length"))
breadth = float(input("enter breadth"))
area = length * breadth.
print("area of rectangle :", area)
```

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

```
A) a = float(input("enter the side:"))  
    perimeter = 4 * a.  
    print("perimeter of the square :", perimeter)
```

⑧ Write a python program to calculate circumference of a circle.

```
A) r = float(input("enter the radius value:"))  
    C = 2 * 3.142 * r.  
    print("Circumference of the circle :", C)
```

⑨ Write a python program to swap two numbers.

```
A) #Swapping two numbers.  
    a = int(input("enter the value of a:"))  
    b = int(input("enter the value of b:"))  
    print("value of a before swapping :", a)  
    print("value of b before swapping :", b)  
    a = a + b  
    b = a - b  
    a = a - b  
    print("value of a after swapping :", a)  
    print("value of b after swapping :", b)
```