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In [1]: def add(x, y):
        return x + y

        def subtract(x, y):
            return x - y

        def multiply(x, y):
            return x * y

        def divide(x, y):
            return x / y

        print("Select operation.")
        print("1.Add")
        print("2.Subtract")
        print("3.Multiply")
        print("4.Divide")

        choice = input("Enter choice(1/2/3/4):")

        num1 = int(input("Enter first number: "))
        num2 = int(input("Enter second number: "))

        if choice == '1':
            print(num1,"+",num2,"=", add(num1,num2))

        elif choice == '2':
            print(num1,"-",num2,"=", subtract(num1,num2))

        elif choice == '3':
            print(num1,"*",num2,"=", multiply(num1,num2))

        elif choice == '4':
            print(num1,"/",num2,"=", divide(num1,num2))
        else:
            print("Invalid input")
```

```
Select operation.
1.Add
2.Subtract
3.Multiply
4.Divide
Enter choice(1/2/3/4):1
Enter first number: 4
Enter second number: 5
4 + 5 = 9
```

```
In [3]: princ_amount = float(input(" Please Enter the Principal Amount : "))
rate_of_int = float(input(" Please Enter the Rate Of Interest : "))
time_period = float(input(" Please Enter Time period in Years : "))

simple_interest = (princ_amount * rate_of_int * time_period) / 100

print("\nSimple Interest for Principal Amount {0} = {1}".format(princ_a
mount, simple_interest))
```

```
Please Enter the Principal Amount : 10
Please Enter the Rate Of Interest : 5
Please Enter Time period in Years : 2
```

```
Simple Interest for Principal Amount 10.0 = 1.0
```

```
In [6]: PI = 3.14
radius = float(input(' Please Enter the radius of a circle: '))
area = PI * radius * radius

print(" Area Of a Circle = %.2f" %area)
```

```
Please Enter the radius of a circle: 3
Area Of a Circle = 28.26
```

```
In [7]: a = float(input('Enter first side: '))
b = float(input('Enter second side: '))
c = float(input('Enter third side: '))
```

```
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)
```

```
Enter first side: 3
Enter second side: 3
Enter third side: 4
The area of the triangle is 4.47
```

```
In [8]: celsius = float(input("Enter temperature in celsius: "))
fahrenheit = (celsius * 9/5) + 32
print('%0.2f Celsius is: %0.2f Fahrenheit' %(celsius, fahrenheit))
```

```
Enter temperature in celsius: 77
77.00 Celsius is: 170.60 Fahrenheit
```

```
In [9]: width = float(input('Please Enter the Width of a Rectangle: '))
height = float(input('Please Enter the Height of a Rectangle: '))

Area = width * height

print("\n Area of a Rectangle is: %0.2f" %Area)
```

```
Please Enter the Width of a Rectangle: 3
Please Enter the Height of a Rectangle: 4

Area of a Rectangle is: 12.00
```

```
In [20]: s=int(input("Enter side length of square: "));
Perimeter_square=s*4
print("Perimeter of the square="+str(Perimeter_square))
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Enter side length of square: 2
Perimeter of the square=8
```

```
In [22]: PI = 3.14
radius = float(input(' Please Enter the radius of a circle: '))

circumference = 2 * PI * radius

print(" Circumference Of a Circle = %.2f" %circumference)
```

```
Please Enter the radius of a circle: 2
Circumference Of a Circle = 12.56
```

```
In [23]: # Python program to swap two variables

num1 = input('Enter First Number: ')
num2 = input('Enter Second Number: ')

print("Value of num1 before swapping: ", num1)
print("Value of num2 before swapping: ", num2)

temp = num1
num1 = num2
num2 = temp

print("Value of num1 after swapping: ", num1)
print("Value of num2 after swapping: ", num2)
```

```
Enter First Number: 3
Enter Second Number: 5
Value of num1 before swapping: 3
Value of num2 before swapping: 5
Value of num1 after swapping: 5
Value of num2 after swapping: 3
```

```
In [ ]:
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