```
num1 = int(input("Enter first no: "))
num2 = int(input("Enter second no: "))
sum = num1 + num2
print(f'The sum of {num1} and {num2} is {sum}')
```

```
Enter first no: 36
Enter second no: 46
The sum of 36 and 46 is 82
```

```
year = int(input("Enter a year: "))
if ((year % 4) == 0 and (year % 100)  != 0) or ((year % 400) == 0):
          print(f"{year} is a leap year")
else:
          print(f"{year} is not a leap year")
```

```
Enter a year: 1704
1704 is a leap year
```

```
import random
print(random.randint(0,9))
```

```
8
```

```
kilometers = int(input("Enter value in kilometers: "))
conv_fac = 0.621371
miles = kilometers * conv_fac
print('{:.2f} kilometers is equal to {:.2f} miles'.format(kilometers,miles))
```

```
Enter value in kilometers: 10
10.00 kilometers is equal to 6.21 miles
```

```
import cmath
a = float(input('Enter a: '))
b = float(input('Enter b: '))
c = float(input('Enter c: '))
sol1 = (-b-cmath.sqrt((b**2) - (4*a*c)))/(2*a)
sol2 = (-b+cmath.sqrt((b**2) - (4*a*c)))/(2*a)

print('The solution are {0} and {1}'.format(sol1,sol2))
```

```
Enter a: 2
Enter b: 3
Enter c: 1
The solution are (-1+0j) and (-0.5+0j)
```

```
def test_prime(n):
    if (n==1):
        return False
    elif (n==2):
        return True;
```

```
        else:
            for x in range(2,n):
                if(n % x==0):
                    return False
            return True
    no=int(input("Enter the number: "))
    if (test_prime(no)) is True :
        print(f"{no} is a prime no")
    else:
         print(f"{no} is not a prime no")
```

```
Enter the number: 53
53 is a prime no
```

```
    loop = 1
    choice = 0
    def add(a,b):
        return a+b
    def sub(a,b):
        return a-b
    def mul(a,b):
        return a*b
    def div(a,b):
        return a/b

    while loop == 1:
        print ("Welcome to calculator.py")
        print ("your options are:")
        print ("----------------")
        print("1) Addition")
        print("2) Subtraction")
        print("3) Multiplication")
        print("4) Division")
        print("5) Quit calculator.py")
        print(" ")
        try:
            choice = int(input("Choose your option: "))
        except:
            print('please enter a valid number for option')
        print(" ")
        print(" ")
        if choice == 1:
            x = int(input("Enter 1st no: "))
            y = int(input("Enter 2nd no: "))
            print(f"The answer is {add(x,y)}")
            print("-------------------------")

        elif choice == 2:
            x = int(input("Enter 1st no: "))
            y = int(input("Enter 2nd no: "))
            print(f"answer is {sub(x,y)}")
            print("-------------------------")
```

```
    elif choice == 3:
        x = int(input("Enter 1st no: "))
        y = int(input("Enter 2nd no: "))
        print(f"answer is {mul(x,y)}",)
        print("-------------------------")

    elif choice == 4:
        x = int(input("Enter 1st no: "))
        y = int(input("Enter 2nd no: "))
        print(f"answer is {div(x,y)}",)
        print("-------------------------")

    elif choice == 5:
      print("-------------------------")
      break

    else:
        print("please choice a valid option from 1 to 5")
        choice=0
print ("Thank-you for using calculator.py!")
```

```
Welcome to calculator.py
your options are:
---------------
1) Addition
2) Subtraction
3) Multiplication
4) Division
5) Quit calculator.py

Choose your option: 1


Enter 1st no: 36
Enter 2nd no: 46
The answer is 82
-------------------------
Welcome to calculator.py
your options are:
---------------
1) Addition
2) Subtraction
3) Multiplication
4) Division
5) Quit calculator.py

Choose your option: 2


Enter 1st no: 64
Enter 2nd no: 36
answer is 28
-------------------------
Welcome to calculator.py
your options are:
---------------
1) Addition
2) Subtraction
3) Multiplication
4) Division
5) Quit calculator.py

Choose your option: 3


Enter 1st no: 36
Enter 2nd no: 36
answer is 1296
-------------------------
Welcome to calculator.py
your options are:
---------------
1) Addition
2) Subtraction
3) Multiplication
4) Division
5) Quit calculator.py

Choose your option: 4


Enter 1st no: 216
```