Python Program to Add Two Numbers getting through key boa

```
num1 = int(input("Enter first no: "))
num2 = int(input("Enter second no: "))
sum = num1 + num2
print('The sum of {0} and {1} is {2}'.format(num1, num2, sum))
```

```
Enter first no: 5
Enter second no: 6
The sum of 5 and 6 is 11
```

Python program to check if the input year is a leap year or not

```
year = int(input("Enter a year: "))

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

```
Enter a year: 2019
2019 is not a leap year
```

Python Program to Generate a Random Number

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

```
8
```

Python Program to Convert Kilometers to Miles

```
kilometers = int(input("Enter value in kilometers"))
conv_fac = 0.621371
miles = kilometers * conv_fac
print('%0.3f kilometers is equal to %0.3f miles' %(kilometers,miles))
```

```
Enter value in kilometers10
10.000 kilometers is equal to 6.214 miles
```

Python Program to Solve Quadratic Equation

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

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

```
Enter a: 5
Enter b: 3
Enter c: 5
The solution are (-0.3-0.9539392014169457j) and (-0.3+0.9539392014169457j)
```

Python Program to find prime or not using function

```
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(" {0} is a prime no".format(no))
else:
     print(" {0} is not a prime no".format(no))
```

```
Enter the number2
 2 is a prime no
```

Calculator program

```
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("The answer is ",add(x,y))

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

  elif choice == 3:
      x = int(input("Enter 1st no: "))
```

```
        y = int(input("Enter 2nd no: "))
        print("answer is ",mul(x,y))

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

    elif choice == 5:
        loop = 0

    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: 5
Enter 2nd no: 6
The answer is  11
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: 11
Enter 2nd no: 5
answer is  6
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: 5
Enter 2nd no: 3
answer is  15
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: 16
Enter 2nd no: 4
answer is  4.0
Welcome to calculator.py
```

```
your options are:

1) Addition
2) Subtraction
3) Multiplication
4) Division
5) Quit calculator.py

Choose your option: 5

Thank-you for using calculator.py!
```