Add Two Numbers

```
a = int(input("Enter value for a"))
b = int(input("Enter value for b"))
print(a+b)
```

```
24
```

Find the Square Root

```
import math
num: int = int(input("Enter the number"))
sqrt: float = math.sqrt(num)

print(sqrt)
```

```
2.23606797749979
```

Calculate the Area of a Triangle

```
length: float = float(input("Enter the length of triangle"))
breadth: float = float(input("Enter the breadth of triangle"))

area: float = 0.5 * length * breadth

print(f"Area of triangle with length ={length}, breadth ={breadth} =
{area}")
```

```
Area of triangle with length =2.0, breadth =2.0 = 2.0
```

Solve Quadratic Equation

```
a: float = float(input("Enter val for a"))
b: float = float(input("Enter val for b"))
c: float = float(input("Enter val for c"))

real: float = -b/(2*a)
img: float = 0.0
if b*b <= 4*a*c:
  img = math.sqrt(abs(b*b-4*a*c)) / (2*a)
  print(f"Res: {complex(real, img)} and {complex(real, -img)}")
else:
  img = math.sqrt(b*b-4*a*c) / (2*a)
  print(f"Res: {real+img} and {real-img}")
```

```
Res: (-2+1j) and (-2-1j)
```

Swap Two Variables

```
def swap(a: int, b: int)-> tuple[int, int]:
  return b,a

a = 5
b = 2
```

```
a, b = swap(a,b)
print(f"a={a}, b={b}")
```

```
a=2, b=5
```

Generate a Random Number

```
import random

print(random.randint(1, 1000))
```

```
418
```

Convert Kilometers to Miles

```
kms:int = 0.5
meter:int = 1_000

print(f"kms: {kms}\tmeters: {kms*meter}")
```

```
kms: 0.5   meters: 500.0
```

Convert Celsius To Fahrenheit

```
def convertCelsiusToFahrenheit(C: float)-> float:
  return (9/5)*C + 32.0

celsius = float(input("Enter the temperature in ºC"))
print(f"Fahrenheit {convertCelsiusToFahrenheit(celsius)} ºF")
```

```
Fahrenheit 89.6 ºF
```

Make a Simple Calculator

```
def calculator():
    # Get the first number from the user
    num1 = float(input("Enter the first number: "))

    # Get the operator from the user
    operator = input("Enter the operator (+, -, *, /): ")

    # Get the second number from the user
    num2 = float(input("Enter the second number: "))

    # Perform the calculation
    result = 0.0
    try:
      if operator == "+":
          result = num1 + num2
      elif operator == "-":
          result = num1 - num2
      elif operator == "*":
          result = num1 * num2
      elif operator == "/":
          result = num1 / num2
```

```
      else:
          result = "Invalid operator"
    except ZeroDivisionError:
      print("Zero division!!")
    finally:
      # Print the result
      print("The result is: ", result)

# Call the calculator function
calculator()
```

```
The result is:  3.0
```

Find Numbers Divisible by Another Number

```
def find_divisible(start, end, divisor):
    divisible_numbers = []
    for i in range(start, end+1):
        if i % divisor == 0:
            divisible_numbers.append(i)
    return divisible_numbers

print(find_divisible(3,100, 2))
```

```
[4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38,
40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72,
74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 100]
```