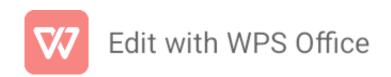
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LAB: 08

Task 1:

Make a calculator using the function the code should use only 2 operands(+ and -) for division and multiplication as well

```
def add(a, b):
    return a + b
def subtract(a, b):
   return a - b
def multiply(a, b):
    result = 0
    negative = False
    if b < 0:
        b = -b
        negative = not negative
    if a < 0:
        negative = not negative
    for _ in range(b):
        result = add(result, a)
    return -result if negative else result
def divide(a, b):
    if b == 0:
        return "Error: Division by zero"
    negative = False
```

```
if a < 0:
       a = -a
       negative = not negative
    if b < 0:
       b = -b
        negative = not negative
   count = 0
    total = a
    while total >= b:
        total = subtract(total, b)
        count = add(count, 1)
    return -count if negative else count
print("Add: ", add(10, 5))
print("Subtract: ", subtract(10, 5))
print("Multiply: ", multiply(4, -3))
print("Divide: ", divide(20, 4))
print("Divide: ", divide(7, 3))
```

Add: 15 Subtract: 5 Multiply: -12 Divide: 5 Divide: 2

Task 2:

Write a functions that ask the user the shape and make the star shaped.

(Like it asks the shape (triangle or Rectangle) and make that shape.

```
def print_shape():
    shape = input("Which shape do you want to print? (triangle/rectangle): ").strip().lower
    if shape == "triangle":
        height = int(input("Enter the height of the triangle: "))
        for i in range(1, height + 1):
            print("*" * i)
    elif shape == "rectangle":
        rows = int(input("Enter the number of rows: "))
        cols = int(input("Enter the number of columns: "))
        for _ in range(rows):
            print("*" * cols)
    else:
        print("Invalid shape. Please choose either 'triangle' or 'rectangle'.")
print_shape()
Which shape do you want to print? (triangle/rectangle): triangle
Enter the height of the triangle: 5
****
```

```
: def print_shape():
       shape = input("Which shape do you want to print? (triangle/rectangle): ").strip().lower()
       if shape == "triangle":
           height = int(input("Enter the height of the triangle: "))
           for i in range(1, height + 1):
               print("*" * i)
       elif shape == "rectangle":
           rows = int(input("Enter the number of rows: "))
           cols = int(input("Enter the number of columns: "))
           for _ in range(rows):
               print("*" * cols)
       else:
           print("Invalid shape. Please choose either 'triangle' or 'rectangle'.")
   print_shape()
   Which shape do you want to print? (triangle/rectangle): rectangle
   Enter the number of rows: 4
   Enter the number of columns: 4
   ****
   ****
```