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PYTHON LAB TASKS(8)

Task 1: Simple Calculator using + and -

Task 2: Star Shapes (Triangle & Rectangle)

Task 1: Simple Calculator (+ and - only)

Simple Calculator using only + and - operators: def multiply(a, b): result = 0for i in range(abs(b)): result += abs(a) if (a < 0 and b > 0) or (a > 0 and b < 0): result = -result return result def divide(a, b): if b == 0: return 'Cannot divide by zero' count = 0a abs = abs(a)b abs = abs(b)while a abs >= b abs: a abs -= b abs count += 1

if (a < 0 and b > 0) or (a > 0 and b < 0):

count = -count

return count

Task 1: Output Examples

Output of the calculator functions:

```
print('4 x 3 =', multiply(4, 3)) Output: 12

print('10 / 2 =', divide(10, 2)) Output: 5

print('6 x -2 =', multiply(6, -2)) Output: -12

print('9 / 3 =', divide(9, 3)) Output: 3
```

Task 2: Draw Star Shapes

Function to draw triangle or rectangle with stars:

```
def draw shape():
  shape = input('Enter shape (triangle or rectangle): ').lower()
  if shape == 'triangle':
    rows = int(input('Enter number of rows: '))
    for i in range(1, rows + 1):
       print('*' * i)
  elif shape == 'rectangle':
    rows = int(input('Enter rows: '))
    cols = int(input('Enter columns: '))
    for i in range(rows):
       print('*' * cols)
  else:
    print('Unknown shape!')
```

Task 2: Output Examples

Sample outputs of the shape drawing function:

```
Input: triangle, rows = 3
Output:
*
***

Input: rectangle, rows = 2, columns = 4
Output:
****
```