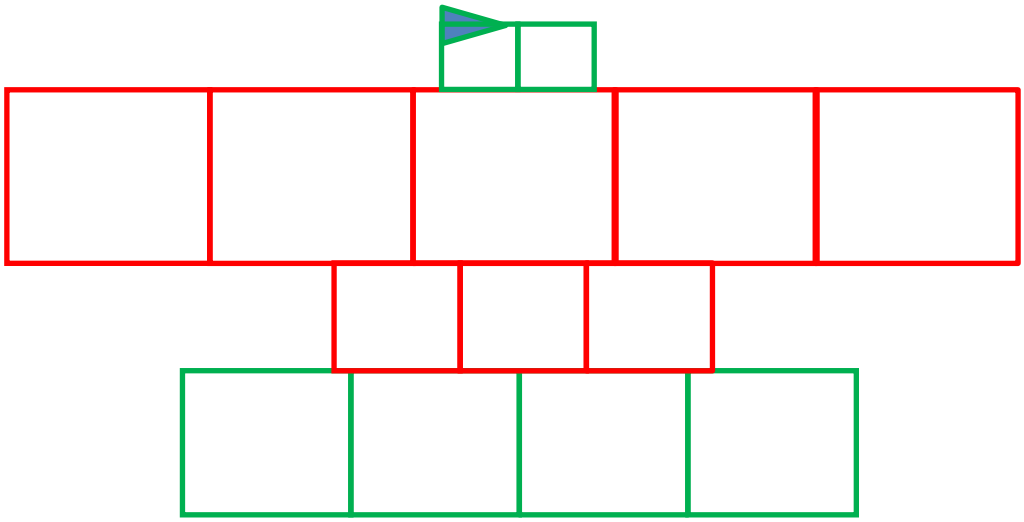
Name _____

CPADS Lab Activity #11

1. Write a strategy to draw a stack of rows where the user is prompted for the number of blocks in each row and the size of the blocks in the row. The rows are centered on top of each other. When drawing a row with an *odd* number of blocks, the color should be red and when drawing a row with an *even* number of blocks, the color should be green. The user should continue to draw rows *until* the height of the stack is greater than *maxHeight.* Assume you are given a **Row(size,n)** function that draws a row of **n** blocks of size **size.** Also assume that the color set before calling the **Row()** function will be the color of the blocks in the row. You do not need to worry about where the cursor starts or ends.



Name _____

2. **Open PyCharm and on your H: drive create a new project named CS100-Lab11. Download the file colorStack.py from the course webpage into the CS100-Lab11 folder**

https://ycpcs.github.io/cs100-fall2019/labs/src/colorStack.py

Using the provided **drawRow(t,squareSize,numSquares)** function, complete **main()** to use the user inputs **maxHeight** which:

- Continually prompts the user for **size** and **numBlocks** to draw a stack with rows containing **numBlocks** of size **size**.
  - You **must** validate that the user enters a positive size of blocks.
  - The user should continue to draw additional rows *as long as* the total height of the stack does not exceed **maxHeight** and the number of blocks is *positive.*
  - The row should be red if the number of blocks in the row is *odd,* and should be green if the number of blocks in the row is *even*.
  - Each row should be centered on the row below it.

Hint: To change the color of the turtle, use **turtle.pencolor()** passing the string **'red'** or **'green'**. To help center each row, consider the turtle starting at the bottom of the center of the row prior to drawing the row, i.e. position the cursor to the top center of each row after drawing it.

An example run is given below:

```
Enter the maximum size for the stack: 75
Enter the size of the blocks: 20
Enter the number of blocks for the row: 5
Enter the size of the blocks: -10
Enter the size of the blocks: -4
Enter the size of the blocks: 15
Enter the number of blocks for the row: 3
Enter the size of the blocks: 30
Enter the number of blocks for the row: 8
Enter the size of the blocks: 45
Enter the number of blocks for the row: 4
```