## CS 107 Sample Test Coding Questions

Consider the following UI and blocks:

Screens	+
<ul> <li>Screen1</li> </ul>	
CountLabel	
🖽 Button1	
Add Components	

Button1 is the one with "click me" on it. CountLabel is the label with a 0.

when Screen1 Opens	set CountLabel - 's Text - to   44 Label 33 0	initialize app variable index to
	CountLabel > 's Text >	set app variable index 🔹 to 🔰 🕻 app variable index 👻
when Button1 Click	set Button1 - 's Text - to ( 44 Button >> length of )	initialize app variable numbers to CO list 100
when Timer1 Fires	if ↓ C Button1   's Text    in list ↓ get    #    / 1	33
do	else Call Timer1 • 's Start • Call Timer1 • 's Stop •	app variable numbers 🗸

Sketch blocks, on paper, for the following problems:

1. Code blocks that show, in CountLabel, how many times Button1 has been clicked.

2. Modify the code so that Button1 also shows how many times it has been clicked. Specify any changes you might need in the initial component properties (Designer or Screen.Opens)

3. Code blocks so that each time you click Button1, it toggles between "click me" and "stop it"

4. Code blocks so that the first number in "numbers" is displayed in CountLabel when the app launches, and each time you click Button1, it shows the next number in the list "numbers". If the last (3rd) number is showing, and Button1 is clicked, show the first item in numbers.

5. Code blocks so that clicking Button1 causes the number in CountLabel to increase by 1 every 2 seconds.

6. Code blocks so that each time you click Button1 it shows how many times its been clicked, but when the number reaches 5, it starts counting down on each click, down to 0, at which time it starts counting up.