Discussion 1: Snap! Scavenger Hunt

INSTRUCTIONS: The questions below are designed to highlight some important Snap! features and clarify some common misconceptions. You should open up Snap! in your browser and experiment as you try to determine the answers. You should also "Import Tools" before you begin (ask your TA if you need help with this).

1. What are "libraries," how do you import them, and why might they be useful?

2. You are writing code to calculate your grade in CS10, when you realize that you've been using the wrong block. Instead of subtracting two numbers, you should be adding them together. What do you do to *relabel* the "subtract" block as an "add" block?

3. How do you find out what the function below does without writing any code?

4. You are trying to run a program in Snap!, but it's taking *forever* to execute. How can you make this program run faster? (Hint: There are two features in Snap! that would allow you to do this.)

5. Which symbol out of $\{!, @, #, \$, \%, \land, \&, *, \sim\}$ helps you create a variable as you are typing the name of a custom block?

6. To help your friend with their math homework, you want to find the tangent of 0. Which block in Snap! allows you to do that? (Hint: Look for a block that lets you do a lot of different mathematical operations....)

7. You're happily drawing images in Snap! when your sprite drifts off the stage and disappears! Uh-oh! How do you get your sprite back onto the stage?

8. You've been trying to debug your code for the past three hours, but still can't figure out what's wrong. What tool in Snap! can you use to help you find the bug?

9. For each of the tasks listed below, find a Snap! block that accomplishes it.

- Return the *opposite* of True or False.
- Check if the variable "mystery" is set to text or a number.
- Ask a question in Snap and automatically save the answer into a variable called "answer."
- Remove a Sprite from the stage (*without* deleting the Sprite entirely).
- Make a sprite *write*, not say, "BJC" with font size 20.
- Find out if the left mouse button is currently clicked.