

Name 1: \_\_\_\_\_

Name 2: \_\_\_\_\_

## Worksheet - Lab 3

For “show us” questions, you **must** download the code and upload it to the D2L dropbox. However it is preferred if you also show it to the instructor for grading in class if time permits.

1. What is the difference between using an **if** block and an **if-else** block?
2. What is the difference between reporter and predicate blocks?
3. What is a script variable useful for? How do we create and use a script variable?
4. Explain why the following code (from Lab 3: Script variables) to draw a polygon is buggy (doesn't work correctly)? Is it possible for it to ever correctly draw a proper polygon or is it always buggy?



5. What block do you use to get input from the user?
6. Why should you use variables to hold user input?

7. Explain the code that you wrote for the `letter grade _` block. When you made the block, did you test 'boundary' values? These are values that are on the boundary between two different outcomes - for example an 89 is a B, but a 90 is an A. What about negative numbers or values greater than 100?

8. Explain the code for that you wrote for the `is _ between _ and _ ?` block.

9. For the Leap Year example, which version of the code did you think was:

- Easiest to read?
- Easiest to rewrite from memory?
- Easiest to debug?
- Which one is the most beautiful?

Which version did you prefer overall? Is it hard to balance between readability, memory, debugging and overall beauty?