

CS 161 Exercise

Reflection on Selection and Iteration

Answer the following questions as accurately as possible. If you are unable to answer a question, refer to the text book, class notes, or your lab activities—or seek assistance from Mike Newton or me. Please type or word-process your answers.

- 1) If we need to perform a task once for each month of the year, what kind of structure is necessary?
- 2) If I write the header **for x in range (7);**, the last value of x will be 6, but if I write the header **for x in [0, 1, 2, 3, 4, 5, 6, 7];**, then what is the last value of x? Why?
- 3) If I put a print statement inside a **for** structure, it will generate as many lines of output as the structure iterates. What can I do to make all the output appear on one line?
- 4) How can I create a for structure that operates on all the odd numbers greater than two and less than 30?
- 5) Derive another solution to the problem posed by question four.
- 6) We can categorize data being **literal** or **variable**. What is the difference between the two? Give an example of a value that we would represent as a literal in a program, and a value that would have to be a variable.