CSCI 2916 Lab 1 – Week 1

LAB: MATH QUIZZER

The basic idea is to develop a quizzer for basic math operations. Think of it as a class supplement for a third grader. At its most basic, the program would ask the kid a simple addition of two single-digit numbers (numbers 0 -9):

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1 + 5 =
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And the kid would type in the answer, and the computer responds telling whether it's right or wrong. The two numbers for the question should be picked randomly so that eventually the computer has asked all the possible single-digit addition questions.

1. Make the basic quizzer, for just one addition question/answer.
2. Have the Quizzer give 10 questions in a row,
3. Keep track of the number of right and wrong answers.

Sample Run 1 (computer prompt/output in **bold,** user input in *italic)*

7 + 8 = *15*
Good job, correct answer!
1 + 6 = *3*
Oops, incorrect answer
3 + 4 = *7*
Good job, correct answer!
…… (up to 10 questions)

You answered 8 correct and 2 incorrect

Remember, the user is a third grade kid. Don't make the prompts harsh. You could even make them fun/silly.

Now make the quizzer a bit more flexible, so it works with subtraction as well. Subtraction will be slightly different, since the first number should be always greater than or equal to the second number. (The kids haven't seen negative numbers yet).

4. Initially, the Quizzer must now ask whether they will be doing **+** or **–**
5. If they pick **–**, then the 10 questions will be subtractions, making sure the second number is not bigger than the first.

Test it all out.

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6. Add the option for single-digit multiplication, like addition.

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7. Finally, add some initial input validation. If the kid does NOT ask for a valid operation (either **+** , **–** , *****), give an error message and ask again what quiz type they want.

EXTRA EXTRA CREDIT: Time the kids. Be able to say at the end, for example:

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You answered 8 right and 2 wrong in 5.2 seconds
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