(60-140) ASSIGNMENT 4

Due: 11:59pm, Nov. 18, 2016

1. **7.2** (p. 155) Which of the following are not legal constants in C? Classify each legal constant as either integer or floating-point.

   (a) `010E2` (b) `32.1E+5` (c) `0790` (d) `100_000` (e) `3.978e-2`

2. **7.7** (p. 158) Modify Programming Project 6 from Chapter 3 so that the user may add, subtract, multiply, or divide two fractions (by entering either `+, -, *`, or `/` between the fractions).

3. **8.3** (p. 177) Write a declaration of an array named `weekend` containing seven `bool` values. Include an initializer that makes the first and last values `true`; all other values should be `false`.

4. **8.4** (p. 177) (C99) Repeat `Q4.3`, but this time use a designated initializer. Make the initializer as short as possible.

5. **8.3*** (p. 178) Create a flowchart to provide a modified solution to the `repdigit.c` program of Section 8.1. In the flowchart, the user can enter more than one number to be tested for repeated digits. It terminates when the user enters a number that is less or equal to 0. Save the flowchart in a file named as `a4_repdigits.rap`, and submit the file as your solution to this question.

6. **8.3** (p. 178) Write an equivalent C program that accomplishes what the flowchart `a4_repdigits.rap` does, and save the program as `a4_repdigits.c` for online submisssion.