

**CECS 130-01&02**

**Spring 2017**

**Assignment 3**

**Assignment due on or before 9:00 pm Friday, February 10, 2017**

1. Do challenge 1 of chapter 3 shown below.
2. Do challenge 3 of chapter 3 shown below.

### **CHALLENGES**

- 1. Build a number guessing game that uses input validation (`isdigit()` function) to verify that the user has entered a digit and not a non-digit (letter). Store a random number between 1 and 10 into a variable each time the program is run. Prompt the user to guess a number between 1 and 10 and alert the user if he was correct or not.**
- 2. Build a Fortune Cookie program that uses either the Chinese Zodiac or astrological signs to generate a fortune, a prediction, or a horoscope based on the user's input. More specifically, the user may need to input her year of birth, month of birth, and day of birth depending on zodiac or astrological techniques used. With this information, generate a custom message or fortune. You can use the Internet to find more information on the Chinese Zodiac or astrology.**
- 3. Create a dice game that uses two six-sided dice. Each time the program runs, use random numbers to assign values to each die variable. Output a "player wins" message to the user if the sum of the two dice is 7 or 11. Otherwise output the sum of the two dice and thank the user for playing.**

### **A note about assignments and reports:**

Your presentation in your reports and assignments reflects great deal about you, your understanding of the assignment and on how much this course means to you. I try very hard to look at the substance of the report but I will be lying if I said that presentation does not influence my judgment. It would be wise on your part to assume that this true in every course at school and in real life/work. I expect your reports to be well formed and conform to the following rules:

1. **First and above all, I will not accept any late assignments and I will not accept any assignments by email. All submissions must be via Blackboard and on time.**
2. All reports have to be submitted as a **PDF** report that contains:
  - 2.1. Title page with your name, assignment number and the day you are actually submitting this report (Not the assignment due date)
  - 2.2. A comprehensive set of snapshots showing the inputs submitted and outputs obtained in the case of a successful output or a failure.
3. A C source code file for each programming problem and each must be named problem\_n.c where nn is the problem number.
4. Make sure that you include as a comment at the top of your file your name and section:

As an example:

```
/* **** */
/* John Q. Public      */
/* CECS 130-11         */
/* Assignment 35        */
/* **** */
```

Failure to do this will cost you points.

5. Please zip both the PDF document with the source code files in one zip files that must be named as lastName\_firstName\_nn.zip where nn is the assignment number, e.g. my zip file for assignment 3 should be called “imam\_ibrahim\_03.zip”.
6. Please do not submit your eclipse or bloodshed project or any IDE project that you may be using. I will be compiling and testing your source code from the text file in part 2 above to test running your applications and to verify that they run.
7. If you do not follow the instructions above I will not grade your homework and you will get a grade of 0 (zero)