

**BIL 105E – Introduction to Scientific and Engineering  
Computing (C)  
Spring 2015-2016  
Homework 1 Report**

Assignment Date: 25.02.2016  
Due Date: 09.03.2016, 23:00

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### Introduction:

In this homework, I am supposed to write a simple game in C Programming Language. The game is simply played between two teams numbered 1 and 2, and the goal of game is catching the ball. It was aimed to develop and measure programming skills of students like "loops" and "if" statements

### Development Environment:

My project includes 1 C file, named 150140032.c and 1 executable file, named 150140032. I wrote my code in Sublime Text 2 editor on Mac OS, and compile it with GCC compiler in two different platforms (Mac OS and Linux). My command that I used to compile is `"gcc 150140032.c -o 150140032"`.

### Variables:

I used 13 different variable (int) in my code. Important ones:

- score1 and score2 contains the team scores
- team contains the current team. This variable can be two different number 0 and 1. If it is 0, it means the current team is 1, otherwise the current team 2. I change the teams when necessary, `"team += 1; team %= 2"`.
- cplayer and nplayer represents current player, and next player.
- isFirst is used to determine the player if he/she is the first player on a round.

I used 3 while loops, 4 if statements and 2 else statements. The first while loop runs until a team wins, the second while loop runs until a team get score on that round, and the last one is written to be sure the next player is different from the current player.

Detailed information is in comment lines of the source code and the flowchart at next page.

### Conclusion:

This was a beneficial homework that improved my programming skills. I fully understood the subject taught. Actually, these were things I already knew, but still it was fun to do it. The only challenging thing about this homework was writing the report.

