

**CPSC 230: Computer Science I**  
**Spring 2018**  
**Programming Assignment X: Lists/Tuples**  
**Due: April 15, 2018**

**The Assignment**

For this assignment you will implement what you have learned about lists and tuples to create your own battle-style game. For this game, a user will play against the computer. Both players will start out with a list of moves that they can use against their opponent. These moves should be stored as a list of tuples with the name of the move and a point value associated with performing that move, ex: `moves = [("kick", 2), ("punch", 5)]`. Rounds will be played as a best 2 out of 3 style. If the user wins a round (i.e. wins two "matches"), they will have the ability to "level up" and new moves will be added to their arsenal. If the user loses a round, they should be demoted back one level. All moves are preprogrammed and not added by the player.

At each of the three matches within a round of the game, the program should display the moves available to the user and prompt the user to select a move. The computer's move should then be randomly selected out of the list of possibilities. Whoever picks a move that has a higher associated point value should win that match (remember to account for the possibility of a tie!).

Your game must include at least 2 levels, and each unique level must have 2 or more moves associated with it that can be added or removed from the base list of moves for level 1.

The game should end when the user beats all levels available. Additionally, the user should have the option to choose to exit the game at any time. If the user loses at level 1, the game should prompt for whether they would like to start over. If not, the game will exit naturally (meaning you should not use an `exit()` or `quit()` method to do so).

As with the adventure assignment, be as creative as you would like for this game, both in theme choice and implementation!

You may work with a partner (i.e. – one other person) to complete this assignment. However, you EACH must submit a copy, even if they are the same. Please write both of your names at the top of your program in a comment, as well as in your README. You will both be assigned the same grade. If one forgets to submit, only that person will receive a zero.

Remember to make the appropriate choices between using lists and tuples for each component of your game, and have fun!

**Due Date**

This assignment is due at 11:59pm on 2-15-2018. Submit via Blackboard; create a zip file with all your files in it. It should be labeled firstinitiallastname\_PA3. Please make sure to include all the required files (README, source files).

**Grading**

Assignments will be graded on correctness, adherence to style, and the inclusion of meaningful comments.