## **Objective:**

Implementation of Dictionaries.

#### **Assignment:**

This program will store and edit the roster and rating information for a soccer team. Similar to how coaches rate players during tryouts to ensure a balanced team.

(1) Prompt the user to enter jersey number (0-99) and rating (1-9) for 5 players. Store the jersey numbers and the ratings in the form of a dictionary. Print the dictionary's elements with the jersey numbers in ascending order (i.e., print the roster from smallest to largest jersey number).

**Hint:** Dictionary keys can be stored in a sorted list.

## For example:

```
Enter player 1's jersey number:
84
Enter player 1's rating:
Enter player 2's jersey number:
23
Enter player 2's rating:
4
Enter player 3's jersey number:
Enter player 3's rating:
5
Enter player 4's jersey number:
30
Enter player 4's rating:
2
Enter player 5's jersey number:
66
Enter player 5's rating:
```

#### **ROSTER**

Jersey number: 4, Rating: 5 Jersey number: 23, Rating: 4 Jersey number 30, Rating: 2

...

(2) Implement a menu of options for a user to modify the roster. Each option is represented by a single character. The program initially prints the menu and the program only ends when the user chooses the option to Quit.

# For example:

#### **MENU**

- a Add player.
- d Remove player.
- u Update player rating
- r List players above a certain rating
- o Print roster
- q Quit.

## Choose an option:

(3) For "Add player" menu option, prompt the user for a new player's jersey number and rating. Append the values in the dictionary.

## For example:

Enter a new player's jersey number:

49

Enter the player's rating:

8

(4) For "Remove player" menu option, prompt the user for a player's jersey number. Remove that player from the roster (remove both jersey number and rating).

## For example:

Enter a jersey number:

4

(5) For "Update player rating" menu option, prompt the user for a player's jersey number. Prompt again for a new rating for that player, and then change that player's rating.

# For example:

Enter a jersey number:

23

Enter a new rating for player:

6

(6) For "List players above a certain rating" menu option, prompt the user for a rating. Print the jersey number and rating of all the players above that specific rating.

# For example:

Enter a rating:

5

Players with rating above 5

Jersey number: 66, Rating: 9

Jersey number: 84, Rating: 7

...

(7) For "Print roster" menu option, print the updated roster.

## For example:

#### **ROSTER**

Jersey number: 4, Rating: 5 Jersey number: 23, Rating: 4 Jersey number 30, Rating: 2

. . .

#### **Instructions:**

- This will be done using Python 3.
- The program should include a comment block at the top with your name, course number, course section and assignment number.

For example: # your name

# CSci 161 L01/L02/L03

# Assignment 6

- Make sure to submit the solution with a .py extension (python file).
- Upload your file as your lastname\_yourfirstname\_assignmentnumber.py For example: lastname\_firstname\_6.py.