

Lists - B Level - Chess Pairings

Write a Python program to generate and display the pairings for the first round of a chess tournament. The program should do the following:

1) Input. Read the player information from attached text file "Input - Chess.txt". The file will contain one line per player, which will have a 4 digit USCF rating followed by the player's name. Your program should handle a file with any number of players (i.e. don't hard-code a number), but it will be an even number. The file might look something like this:

```
2699 Bobby Fisher
2857 Gary Kasparov
1692 The Rickster
1275 A. Dude
```

Your program should read these lines from the text file and store them in list.

2) Sequence. Your program should then arrange the list elements in descending order, which will put the highest rated players at the top of the list.

3) Generate Pairings. There will be an even number of players. Your program should **logically** divide the player list in half, and generate pairs using a player from each half of the list. For example, if there are 10 players sorted by rating, player 1 plays player 6, 2 plays 7, etc.

4) Display the generated pairings. Your output should be similar to:

```
Welcome to the ACC Invitational Chess Tournament!
```

```
First round pairings:
```

```
Board 1  2857 Gary Kasparov vs. 1692 The Rickster
Board 2  2699 Bobby Fisher vs. 1275 A. Dude
```

Hints:

Use the built-in sort and/or reverse list methods to get your list into the proper sequence.

Even though each line contains both a number followed by a name, there is no need to separate them. That would only make the program harder, and is completely unnecessary. Just operate on a single list of strings (which happen to begin with a number).

Once your list is properly sequenced, the pairings can be accomplished in several different ways. You could use slicing to physically create two lists, or you could use some creative indexing.

Remember that it takes two players for a game, so there will be half as many pairs as players.