Project 12-1: Game Stats

Create a program that allows you to view the statistics for a player of a game.

Console

```
Game Stats program

ALL PLAYERS:
Elizabeth
Joel
Mike

Enter a player name: elizabeth
Wins:   41
Losses: 3
Ties:   22

Continue? (y/n): y

Enter a player name: john
There is no player named John.

Continue? (y/n): y

Enter a player name: joel
Wins:   32
Losses: 14
Ties:   17

Continue? (y/n): y

Enter a player name: mike
Wins:   8
Losses: 19
Ties:   11

Continue? (y/n): n

Bye!
```

Specifications

- The program should use a dictionary of dictionaries to store the stats (wins, losses, and ties) for each player. You can code this dictionary of dictionaries at the beginning of the program using any names and statistics that you want. Make sure to provide stats for at least three players.
- The program should begin by displaying an alphabetical list of the names of the players.
- The program should allow the user to view the stats for the specified player.

Project 12-2: Bird Counter

Create a program for birdwatchers that stores a list of birds along with a count of the number of times each bird has been spotted.

Console

```
Bird Counter program

Enter 'x' to exit

Enter name of bird: red-tailed hawk
Enter name of bird: killdeer
Enter name of bird: snowy plover
Enter name of bird: western gull
Enter name of bird: killdeer
Enter name of bird: western gull
Enter name of bird: black-capped chickadee
Enter name of bird: x

Name                      Count
========================= =====
Black-Capped Chickadee    1
Killdeer                  2
Red-Tailed Hawk           1
Snowy Plover              1
Western Gull              2
```

Specifications

- Use a dictionary to store the list of sighted birds and the count of the number of times each bird was sighted.
- Use the pickle module to read the dictionary from a file when the program starts and to write the dictionary to a file when the program ends. That way, the data that's entered by the user isn't lost.
- After the user finishes entering the birds that have been spotted, sort the bird names in alphabetical order before displaying the names and counts.

Project 12-3: Champion Counter

Create a program that reads a text file that contains a list of FIFA World Cup champions and determines the country that has won the most championships.

Console

```
FIFA World Cup Winners

Country         Wins  Years
=======         ====  =====
Argentina       2     1978, 1986
Brazil          5     1958, 1962, 1970, 1994, 2002
England         1     1966
France          1     1998
Germany         4     1954, 1974, 1990, 2014
Italy           4     1934, 1938, 1982, 2006
Spain           1     2010
Uruguay         2     1930, 1950
```

Specifications

- Your instructor should provide a text file named world_cup_champions.txt that contains data like this:

```
Year,Country,Coach,Captain
1930,Uruguay,Alberto Suppici,José Nasazzi
1934,Italy,Vittorio Pozzo,Gianpiero Combi
1938,Italy,Vittorio Pozzo,Giuseppe Meazza
...
...
2002,Brazil,Luiz Felipe Scolari,Cafu
2006,Italy,Marcello Lippi,Fabio Cannavaro
2010,Spain,Vicente del Bosque,Iker Casillas
2014,Germany,Joachim Löw,Philipp Lahm
```

- When the program starts, it should read the text file and use a dictionary to store the required data using the name of each country that has won the World Cup as the key.
- The program should compile the data shown above and display the countries alphabetically.

Project 12-4: Monthly Sales

Create a program that allows you to view and edit the sales amounts for each month of the current year.

Console

```
Monthly Sales program

COMMAND MENU
view   - View sales for specified month
edit   - Edit sales for specified month
totals - View sales summary for year
exit   - Exit program

Command: view
Three-letter Month: jan
Sales amount for Jan is 14,317.00.

Command: edit
Three-letter Month: jan
Sales Amount: 15293
Sales amount for Jan is 15,293.00.

Command: totals
Yearly total:       67,855.00
Monthly average:     5,654.58

Command: view
Three-letter Month: july
Invalid three-letter month.

Command: exit
Bye!
```

Specifications

- Your instructor should provide a text file named monthly_sales.txt that consists of rows that contain three-letter abbreviations for the month and the monthly sales.
- The program should read the file and store the sales data for each month in a dictionary with the month abbreviation as the key for each item.
- Whenever the sales data is edited, the program should write the changed data to the text file.