Write a program that will display a welcome message to the user and a menu of options for the user to choose from.

Welcome to the Temperature Analyzer program. Please choose from the following options:

1. Upload text data

2. View data

3. Download statistics

4. Print statistics file

5. Exit the program

Write a function called UploadTextData to do this task. Choose the appropriate arguments and return type

**Option 1: Upload Text Data**

Ask the user for the name of the file.

Open the file for reading.

Use for loop or while loop to read one line at a time.

Split every line to get the individual parts by using list of lists or list of dictionaries.

Once you are done reading in the file, the main menu will be displayed again.

Input File Format:

Month Day Year MinTemperature MaxTemperature

Sample Input File:

January 10 2018 23 28

January 11 2018 23 30

January 12 2018 18 25

**Option 2: View Data**

Write a function called PrintData to do this task. Choose the appropriate parameters and return type.

-Use for loop or while loop the go through the data structure.

- get the individual parts and print.

Once done printing, the main menu will be displayed again.

Sample Output:

Date: January 10, 2018 Low Temperature: 23, High Temperature: 28

Date: January 11, 2018 Low Temperature: 23, High Temperature: 30

Date: January 12, 2018 Low Temperature: 18, High Temperature: 25

**Option 3: Download Statistics:**

If the user chooses this option, the program will create a statistics file with the following data:

Write a function called CreateStatsFile to do this task. Choose the appropriate parameters and return type.

* Create a stats.txt file to write to.
* A loop to go through the list. Look at the maxtemperature.

**a.** Day with highest temperature, and the highest temperature

variable to store the highest temperature so far, variable to store the date.

At the start make = to the first num.

In each iteration pf the loop compare the temperature in the line.

Update the 2 variables if we find a higher temperature to the highest temperature stored.

**b.** Day with lowest temperature, and the lowest temperature

create a list of temperatures than you call min and max temperature.

Once I have the temperature, go through the list and see which day has that temperature.

**c**. Average of the highest temperature for the whole year

**d.** Number of days data collected for, for each month.

Once done creating the statistics file, the main menu will be displayed again.

**Option 4: Print Statistics File**

If the user chooses this option, the program will print the contents of the statistics file “stats.txt" to the screen.

**Option 5:** **Exit the Program**

If the user chooses this option, the program will exit. It will print the message “Thank you for using the Temperature Analyzer Program!” before exiting.

Note: If any other option (other than exit) is chosen, the task will be performed and then the menu will be displayed again.