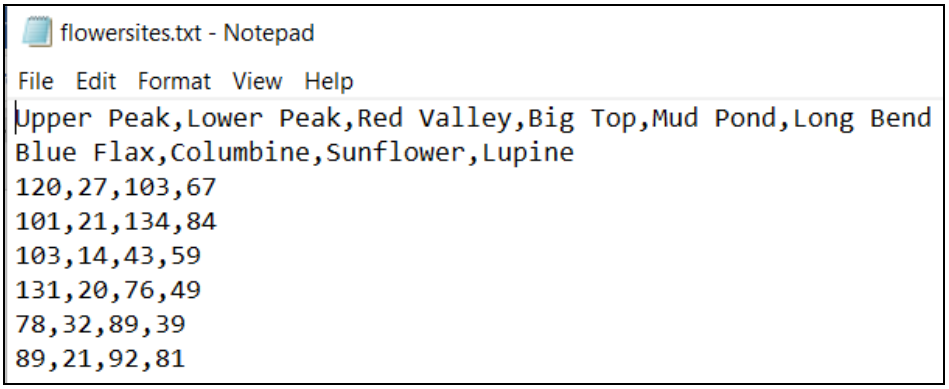
CSCI 275 Assignment 15Extra Credit
Due: Saturday 5/14/22
No Late Due Date
Worth: 60 points

This program practices with 2D arrays. The 2D array data structure is required so do not use collection classes (ex. vector).

At various sites, the number of some wildflowers have been counted. Text file **flowers.txt** lists a line of site names followed by a line of flower names using the comma as separator. Following these two lines are lines of collection counts in order of the listed site names and flower names. Code should work for any valid data file where the number of sites and flowers are determined by the top two lines.

For example, at site Upper Peak, there were 120 blue flax, 27 columbine, 103 sunflower and 67 lupine plants.



The data structures for this data are modelled below. The site names array is parallel to the rows of the 2D counts array. The flower names array is parallel to the columns of the 2D counts array

		Blue Flax	Columbine	Sunflower	Lupine
		0	1	2	3
Upper Peak	0	120	27	103	67
Lower Peak	1	101	21	134	84
Red Valley	2	103	14	43	59
Big Top	3	131	20	76	49
Mud Pond	4	78	32	89	39
Long Bend	5	89	21	92	81

Display a neat chart of flower and site data.

Run an interactive loop where the user enters a site name. Report a neat chart of counts, averages, and differences for each flower. Report an error if the site is not found.

For example, for Upper Peak site the Blue Flax count is 120. The average Blue Flax count over all sites is 103.67. The difference is 16.33 indicating Upper Peak site has 16.33 more flowers than average.

```
Wildflower Counts
              Blue Flax      Columbine      Sunflower      Lupine
Upper Peak    120            27             103            67
Lower Peak    101            21             134            84
Red Valley    103            14             43             59
Big Top       131            20             76             49
Mud Pond      78             32             89             39
Long Bend     89             21             92             81

Enter site (quit to end): Upper Peak
              Blue Flax      Columbine      Sunflower      Lupine
Upper Peak    120            27             103            67
Averages:     103.67         22.50          89.50          63.17
Differences:  16.33          4.50           13.50          3.83

Enter site (quit to end): Muddy Pond
Muddy Pond is not found

Enter site (quit to end): Mud Pond
              Blue Flax      Columbine      Sunflower      Lupine
Mud Pond      78             32             89             39
Averages:     103.67         22.50          89.50          63.17
Differences:  -25.67         9.50           -0.50          -24.17

Enter site (quit to end): quit
```

Data file **flowers2.txt** can be used to test your code works for any valid data file.

Submission:
Upload the main application to Brightspace. Note: Code is not accepted that does not compile.

Need Help?
1. Email your question with your attached .cpp source code file. Do not attach an image or a pdf. Do not paste your code into the email body. I would like to download your code so I can test it as needed.

2. Use the scheduling software on the left side of Brightspace to schedule a Zoom meeting with me. If you cannot make the listed times, email me a list of your free times.