

Objective:

Data Visualization

Assignment:

1. Prompt the user to enter the title for the dataset table. Output the title.

For example:

Enter a title:

Number of Novels Authored

You entered: Number of Novels Authored

2. Prompt the user for the headers of two columns of a table. Output the column headers.

For example:

Enter the column 1 header:

Author name

You entered: Author name.

Enter the column 2 header:

Number of novels

You entered: Number of novels.

3. Prompt the user for data. Data must be in this format: string, int. Store the information before the comma into a string variable and the information after the comma into an integer. The user will enter -1 when they have finished entering data. Output the data. Store the string components of the data in a list of strings. Store the integer components of the data in a list of integers.

For example:

Enter a data (-1 to stop input):

Jane Austen, 6

Data string: Jane Austen

Data integer: 6

4. Perform error checking for the data point entries. If any of the following errors occurs, output the appropriate error message and prompt again for a valid data point.

- If entry has no comma Output: Error: No comma in string.
- If entry has more than one comma Output: Error: Too many commas in input.
- If entry after the comma is not an integer Output: Error: Comma not followed by an integer.

For example:

Case – 1

Prompt: Enter a data (-1 to stop input):

User Input: Ernest Hemingway 9

Error: No comma in string.

Case – 2

Prompt: Enter a data (-1 to stop input):

User Input: Ernest, Hemingway, 9

Error: Too many commas in input.

Case – 3

Prompt: Enter a data point (-1 to stop input):

User Input: Ernest Hemingway, nine

Error: Comma not followed by an integer.

Case – 4 (Correct data input format)

Prompt: Enter a data point (-1 to stop input):

User Input: Ernest Hemingway, 9

Data string: Ernest Hemingway

Data integer: 9

5. Output the information in a formatted table. The title is right justified with a minimum field width value of 33. Column 1 has a minimum field width value of 20. Column 2 has a minimum field width value of 23. (Hint: You can use this command to align the title, `print('%33s' % Title)`).

For example:

Number of Novels Authored

Author name | Number of novels

Jane Austen | 6

Charles Dickens | 20

Ernest Hemingway | 9

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 5
- 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_5.py.