Assignment 1 – 25% of Total Score

Deadline for Submission:	22 Sep 2024 (Sun) 23:59

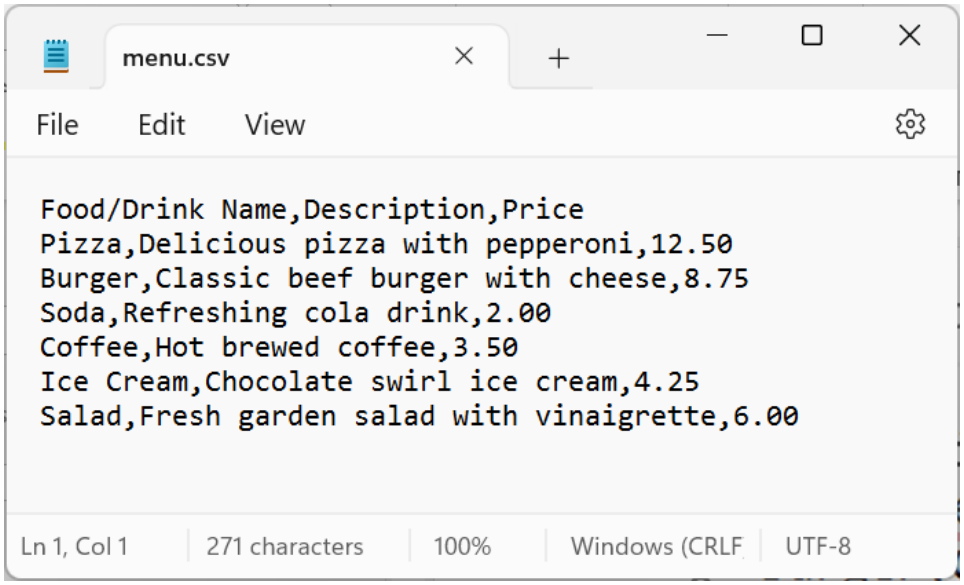
Question 1 – 15%

Objective:

Create a **Python program (food - *your name*.py)** that allows users to search for food and drink items based on input characters. The program will read menu data from a CSV file and display matching items along with their prices.

Provided Sample Menu

Assume there is a CSV file named `menu.csv` located at `C:\food`.



Each line represents a menu item with the following attributes:

Food/Drink Name: Name of the menu item (e.g., Pizza, Burger).

Description: Short description of the item.

Price: Price of the item in dollars (e.g., 12.50).

Instructions:

Requirement 1 – User Input:

- Prompt the user to input a character or a set of characters (case-insensitive).
- Validate that the input consists of only English letters or ‘space’. If not, ask the user to re-enter a valid input.

Requirement 2 – Menu Search:

- Read the data from `menu.csv`.
- If the menu file is not found, display the message: "The Menu cannot be found!"
- Otherwise, search for menu items whose names start with the inputted characters.
- Display the matching food/drink names along with their prices.
- If no menu items match the criteria, display the message: "No matching items found."

Provided Sample Output

Case 1 – Small Letter Input:

```
Enter a character or characters: p
Matching items:
- Pizza: $12.50
```

Case 2 – Capital Letter Input:

```
Enter a character or characters: S
Matching items:
- Soda: $2.00
- Salad: $6.00
```

Case 3 – Two or more Letters Input:

```
Enter a character or characters: Ic
Matching items:
- Ice cream: $4.25
```

Case 4 – Non-Letter Input (except space):

```
Enter a character or characters: @
Invalid input. Please enter English letters only.
```

Case 5 – No match Items:

```
Enter a character or characters: Z
No matching items found.
```

Case 6 – menu.csv does not exist:

```
The Menu cannot be found!
```

QUESTION 2 – 10%

Objective:

Assume there are over 100 photos with file extension `.jpg` in a folder `C:\photos`
You are required to create a **Python program *(photo - your name.py)*** to categorize the photos by file size.

Instructions:

Requirement 1 – Create folders:

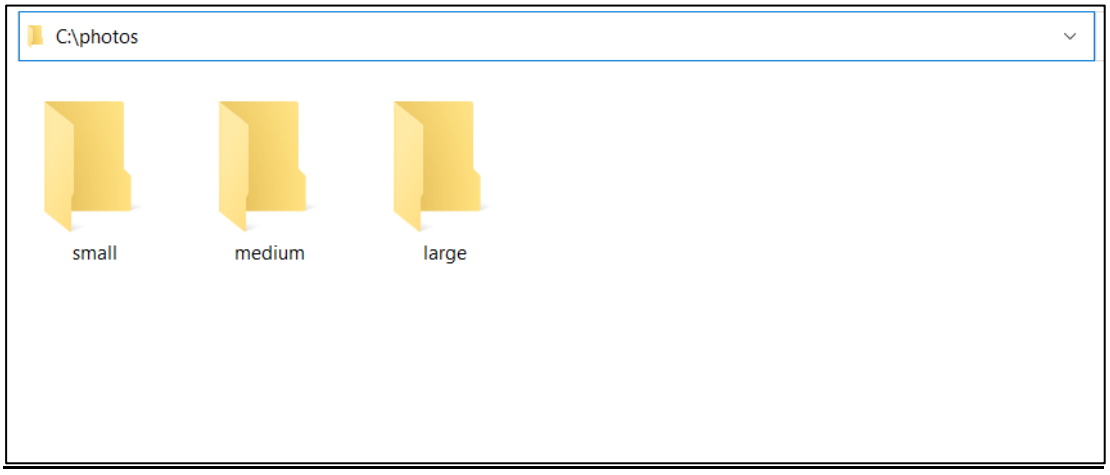
Create three folders named "`small`", "`medium`" and "`large`" under `C:\photos`

Requirement 2 – Move photo according to the file size:

Move the photos to different folders according to their sizes, refer to the below table.

File Size	Destinated Folder
< 3MB	C:\photos\small
>= 3MB and < 7MB	C:\photos\medium
>= 7MB	C:\photos\large

(Sample) Output Screen



Requirement 3 – Print the summary:

(Sample) Output Screen

```
Categorized 553 photos:
- 35 photos moved to 'small' folder
- 469 photos moved to 'medium' folder
- 49 photos moved to 'large' folder
```

Guidelines on submission of this Assignment:

1. Please submit all the files in Moodle (if available);
2. In addition to meeting the requirements of each question, the solution should also incorporate proper coding style and include inline comments.
3. There should be 3 files you should submit:
    a. food - *your name*.py
    b. photo - *your name*.py
    c. *Your name*.docx (Copy all the Program code of Question 1 and 2 to this word file)