Question:

Store the csv file “ProductPriceIndex.csv” in a dataframe.

1. Loop and print the 7th alphabet of all the string elements in the column “productname” of the dataframe. Use a try except block in executing the code. For any error exception, print the name of the productname that does not have 7th alphabet.

E.g. “Celery does not have 7th alphabet.”

1. Divide the dataframe based on unique product names. E.g. a csv file for all rows where the column “productname” is **Strawberries**, another csv file that have all rows in the dataframe where “productname” is **Honeydews**. The name of the csv files will be the product names respectively. Example: The name of the csv file which contains the data where product name is “Strawberries” will be “Strawberries.csv”. **Remove the “productname” column before saving it to the csv file.** Create a directory named "Divided Dataset based on product name". In that folder save the csv files.
2. From problem 1, instead of try-catch block, solve the same problem using if-else condition
3. *(bonus question)* From problem2, merge all the datasets saved in the folder "Divided Dataset based on product name" into a single dataset. Add a column named “product\_name” where the value of the “product\_name” column will be the file name of each dataset file saved in the folder. For example, when processing the data of the file “Strawberries.csv”, a new column “product\_name” is added where value is “Strawberries”, the file name in every row of the dataset. Do the same for all the files. Merge all the files to a single csv file -> “merged\_dataset.csv” and save the csv file to the folder -> "Divided Dataset based on product name".
4. *(bonus problem)* Find the last edited time of the file -> “merged\_dataset.csv”. You can do your own research on [os.path — Common pathname manipulations — Python 3.12.2 documentation](https://docs.python.org/3/library/os.path.html#os.path.getmtime)

Give the time in year, month, hours, minutes based on a format on your wish. (Do your own research on how to find it).