## **Project 1 – Writing Exercise**

Midshipman Lynn E. R. Regres is writing the data section of her report on the case, "Forecasting Beer Demand at Anadolu Efes". Her first draft of the data section is given below. She is unsure if she included all the necessary details to get a good grade on her project. Lynn thought it would be helpful to have one of her peers review her work before submitting it to Professor Stan D. Grader. Standard C3 in the grading rubric relates directly to the information that should be included in the data section and standards D1-D8 are the standards for writing. Grade Lynn's writing and provide some feedback for how you think she could improve her work.

Our linear regression model uses data given to us by the company. There were two tables. The first data table has the columns year, month, beer consumption, average beer price, average raki price, average canned soft drink price, average canned beer price, and average draft beer price. The second data table has the columns Czechoslovakia, Germany, The United Kingdom, The United States, France, and Other (total).

To use this data, we begin by adding a new column to the second data table for the expected tourist demand. Then we use the merge function in python, to merge the two tables together to get a final data table. An example of this code is shown below.

```
BeerData = BeerData.merge(TouristData, on= ['Year', 'Month'])
```

Once we have the data merged, we can now put it into the linear regression.

2	

		Exemplary	Satisfactory	Developing	Unsatisfactory
C3	Describing, wrangling, and analyzing the input data	Provides a clear and detailed description of the input data used; wrangles the input data into a form suitable for the model; presents a correct analysis of the input data (e.g. distribution fitting) if appropriate	Provides an adequate description of the input data used; a few minor details are missing; wrangles the in- put data into a form suitable for the model; presents a correct analysis of the input data if appropriate	Description of the input data used is unclear or missing key details; data wrangling or input data analysis has errors	Description of input data is missing; data wrangling or input data analysis is missing
D1	Grammar, spelling, punctuation (GSP)	Text contains no GSP errors	Text has a few minor GSP errors	Text has serious GSP errors or a distracting number of minor GSP errors	Text is not understandable in current form due to GSP errors
D2	Organization	Presents ideas in a logical order; report organized into sections as taught in class	Presents ideas in a mostly logical or- der; report organized into sections as taught in class	Report organized into sections as taught in class; ideas in individual sections are not organized	No organization present in paper
D3	Clarity	Text is clear and concise	Text is clear and readable for the most part	Text is wordy or awkward	Text is unclear
D4	Completeness	Text provides good depth and detail; ideas are fully developed and supported; describes all parts of the project, including: background and motivation, problem description, data summary, model description, results, recommendations and limitations	Text provides adequate depth; a few needed details or ideas are omitted; major ideas are adequately developed and supported	Additional depth is needed in places; at least one major idea is not adequately developed and supported	Important details or ideas are often omitted, not developed, or not supported
D5	Tone	Appropriate for an academic journal or professional memo	Appropriate for a student paper	Appropriate for a student paper but with sections of informality	Too informal
D6	Technical language	All technical language is used correctly, including terminology related to formulation and analysis; all mathematical symbols and variable names are correctly explained in words	Most technical language is used correctly; most mathematical symbols and variable names are correctly explained in words	Many errors in technical language; many mathematical symbols and vari- ables names are not correctly ex- plained in words	Technical language is consistently in- correct or imprecise; mathematical symbols and variables are not ex- plained in words at all
D7	Citations and references	All sources are correctly documented; in-text citations and reference list follow APA style exactly	Most sources are correctly documented; in-text citations and reference list have a few minor errors in following APA style	Most sources are correctly documented; in-text citations and reference list do not follow APA style	Fails to correctly document sources, in-text citations and reference list have major errors and do not follow APA style
D8	Appearance and formatting (AF)	Consistent and professional appearance throughout: font sizes for text, captions, and section headings are appropriate and consistent; equations are properly formatted	Report has a few minor AF issues	Report has consistent AF issues such as missing captions, missing titles and axes labels on graphs; a distracting number of minor AF issues	Report has serious AF issues