**EC2227 Lab, Problem Set 1**

**Name:**

**Lab:**

**Group members:**

**Question 1 (30 points)**

1. (2pt) Data structure (select one): ( ) Cross-section, ( ) Time Series, ( ) Panel data
2. (2pt) Number of restaurants in the data:
3. (2pt) Number of restaurants in New Jersey:
4. (2pt) Average starting wage:
5. (2+2=2pts) A dummy variable is defined as:

List all dummy variables in this dataset:

1. (5pts) Command for generating *above\_min\_wage*:
2. (2.5+2.5 = 5pts) Average starting wage in restaurants in New Jersey:

Average starting wage in restaurants in Pennsylvania:

1. (3pt) Do all fast-food restaurants in this data belong to a chain:
2. (2+2 = 4pts) Command to create a value label:

Command for assigning that value label to *chain*:

1. (3pt) Command for labelling *chain*:
2. (5pts) Command for creating the variable *avg\_price*:
3. (4+4 = 8pts) Command to collapse the data set to desired format:

Command to export it as an excel file:

**Question 2** (55 points)

1. (2 pts)

Type of dataset:

1. (2+1+1+1= 5 pts)

Command to keep the observations for the 1990s:

Command to save the file:

Type of dataset:

Number of observations:

1. (2+1+1+1= 5 pts)

Command to find the correlation matrix:

Variable that has strongest correlation with **pris**:

Is it positive or negative?

Does this support your friend’s claim?

1. (3+2 =5 pts)

Command to generate the scatterplot:

Is the relationship positive or negative?

1. (1 + 1 + 1 = 3 pts)

Command to keep MA only:

Command to save the dataset:

Type of dataset:

1. (6+2= 8 pts)

Command to generate **pris\_gro**:

Average of **pris\_gro:**

Command to find the average of **pris\_gro**:

1. (2 pts)

Command to generate **pris\_gro\_lag**:

1. (2+2+1= 5pts)

Correlation coefficient:

Command to find the correlation coefficient:

Command to create the scatterplot with line of best fit:

Is your friend correct in the case of Massachusetts?

1. (2+4+4= 10 pts)

Command sort your data:

Command to generate **pris\_gro**:

Command to generate **pris\_gro\_lag**:

1. (2+4+2+2= 10 pts)

Command(s) to change the names of state and year (*if needed*):

Command to merge the two datasets:

Command to generate the correlation between **mrdrte** and **pris\_gro\_lag:**

Command to produce a scatterplot between **mrdrte** and **pris\_gro\_lag:**