

## SAS: Lab 2

Note: this lab contains two parts.

### Part 1.

#### Exploring the data:

Using the **sashelp.stocks** answer the following questions:

Question 1. How many observations are in the data set?

Question 2. What is the mean of the variable Volume?

Question 3. What is the standard deviation of the variable Date?

Using the **sashelp.stocks** answer the following questions:

Question 4. What is the frequency of the value **IBM** in the variable Stock?

Question 5. What is the frequency of the value **01AUG86** in the variable Date?

#### Exploring extreme observations:

Using the **sashelp.stocks** answer the following questions:

Question 6. What is the lowest value for the variables: Close?

Question 7. What is the observation number for the lowest value for the variables: Close?

Question 8. What is the highest value for the variable Open?

## Part 2.

**For this section, you will need to download the Orion.zip file that it posted on Moodle. After you download it (and unzip the file), create a library called orion that points to the Orion folder.**

### **Creating a SAS Data Set:**

Write a DATA step to create **work.bigdonations**. Use **orion.employee\_donations** as input, and answer the following questions:

Question 1. Use the SUM function to create a new variable, Total, which holds the sum of the four quarterly donations. What is the highest value of the variable Total in the data set?

Question 2. Create a new data set that contains only observations that meet the following two conditions:

- Total values greater than or equal to 50
- Select only those observations that were paid by credit card

How many observations does the data set have?

### **Subsetting Observations Based on Conditions:**

Write a DATA step to create **work.delays**. Use **orion.orders** as input, and answer the following questions:

Question 3. Create a new variable, Order\_Month, and set it to the month of Order\_Date. What is the size of the work.delays data set (in bytes)?

Question 4. Use the appropriate statements to select only the observations that meet all of the following conditions:

- Delivery\_Date values that are more than four days beyond Order\_Date
- Employee\_ID values that are equal to 99999999
- Order\_Month values occurring in August

How many observations does the data set have?