

## DSCC 201/401 Homework Assignment #6

Due: **November 10, 2021 at 9 a.m. EST**

**The answer to these questions should be submitted via Blackboard. Read the questions carefully and provide the best possible answers. Only one submission for this assignment will be allowed. Revised submissions will not be allowed. So please make sure you only submit your final answers.**

1. Go to blackboard and download the homework CSV file called:  
SAS\_HMWK\_TEMP\_MISS\_DATASET.csv

Once the file is on your computer, transfer the file into your BlueHive environment. Then use the SAS import process presented during Lecture 15 and create a SAS dataset from the imported CSV file. Name the newly created SAS dataset as HMWK6. To receive full credit for this portion of the homework, show the SAS program code that was generated to import the CSV file and create the SAS dataset.

2. Perform a Proc Sort statement on the SAS dataset called HMWK6, such that a newly created SAS dataset called HMWK6SRT will be created. *Note: you may want to look up the SAS documentation for a Proc Sort statement in order to see the syntax on how to create a sorted output dataset* [https://documentation.sas.com/doc/en/pgmsascdc/9.4\\_3.5/proc/titlepage.htm](https://documentation.sas.com/doc/en/pgmsascdc/9.4_3.5/proc/titlepage.htm). Have the Proc Sort statement sort the dataset by location and then by month and then by date. Then print out the first 10 observations of the sorted dataset called HMWK6SRT. To receive full credit for this portion of the homework, show the SAS program code that was generated to perform the Proc Sort along with a screenshot of the SAS output showing the proc print statement for the first 10 observations of the newly sorted dataset.

3. Now take the sorted dataset called HMWK6SRT and perform a Proc Means statement in order to find the answers to the questions below. To receive full credit for this portion of the homework, show the SAS program code that was generated to perform the Proc Means along with a screenshot of the SAS output of the Proc Means that shows the answers to the questions below:

- a) What is the average temperature of Buffalo in October?
- b) What is the average rainfall of Rochester in December?
- c) What is the average temperature of Syracuse in September?

4. Use the proc means command to show how many values are missing for the HMWK6SRT dataset. To receive full credit for this portion of the homework, show the SAS program code that was generated to perform the Proc Means along with a screenshot of the SAS output.

5. You will notice that the September 30<sup>th</sup> dates are missing values for the temperature and precipitation (in inches) for Buffalo, Rochester, and Syracuse because the monitoring

equipment was broken that day. It turns out that the information was gathered at a different weather station and uploaded to the database the next day. Therefore, update your dataset such that the following values are entered in order to complete all of the values for the variables in the dataset:

LOCATION	MONTH	DATE	TEMPF	PRECINCH
Buffalo	Sep	9/30/21	64	0.179
Rochester	Sep	9/30/21	82	0.000
Syracuse	Sep	9/30/21	80	0.000

Use these new values added to the original dataset to perform a new Proc Means statement to show the averages in questions a, b, and c below. Ensure you perform the Proc Means on the new dataset that has no missing values. In other words, to receive full credit for this portion of the homework, show the SAS program code that was generated to perform the Proc Means along with a screenshot of the SAS output of the Proc Means that shows the answers to the questions below:

- a) What is the average temperature of Buffalo in September?
- b) What is the average rainfall of Rochester in September?
- c) What is the average temperature of Syracuse in September?