## Assignment 4 – Data Manipulation

**Objectives**

Understand and learn how to use pandas properly.

**Datasets**

waether-data.csv

**Assignments**

Provide Python code using Pandas to read the above file and carry out exercise as per Preparation & Reporting sections. You may install any package as required

**Data Preparation:**

1. Provide count of NA readings in Qzone, Solar, Wind, Temp
2. Populate NA readings of Ozone & Solar using average of valid values above & below the reading.
3. Populate NA readings of Wind & Temp using average of 5 valid values above & below the reading.
4. Add a new column to show weather status as

Temperature – Very Hot, Hot, Mild, Cool, Cold

Wind Speed – Storm, Windy, Breezy, Slow Wind, Still

**Submission Guidelines**

1. You must submit the final version of your .py program as   
   “a5-StudentName.py.
2. Please ensure that your .py is well documented.
3. In case you make any assumptions, please note the assumptions at the start of the .py file.
4. Your .py file should be emailed, as an attachment.
5. The email must be sent by the end of day on which the assignment is due.