

Name: Heng Teng Yi

Problem Set - Plotting (20 marks)	20/20
--	--------------

- **[1 mark] Data Acquisition.**

We'll be working with data from Ang Mo Kio station: download the data for each month from January 2017 through July 2017 in csv format. Import the data and combine them into one dataframe.

1/1

- **[8 marks] Plotting with Matplotlib**

Our next goal is to create two plots using matplotlib: one plotting mean, maximum, and minimum temperature, and the other plotting mean and max wind speed.

8/8

- **[11 marks] Plotting with plot.ly**

Finally, we want to create a visualisation using live weather data. For this, we'll use Particulate Matter 2.5 readings.

- a) Request the latest Particulate Matter 2.5 readings from data.gov.sg. Store the returned data in a python dictionary. (1 mark)
- b) PM 2.5 readings are taken from five different geographical locations. Average these five readings to obtain an average PM 2.5 reading for the entire island of Singapore. (1 mark)
- c) Use the region_metadata field in the response to plot the longitude and latitude coordinates of the five locations on a map of Singapore. Use plotly and Mapbox to accomplish this (you'll need a Mapbox account for an API access token). Your code should read the longitude and latitude coordinates directly from the response data; coordinates should not be hardcoded. Your hover text should display the location name and the current PM reading for that location. (9 marks)

11/11

Excellent formatting and information included on the hover text of your mapbox plot!