

## Homework #12

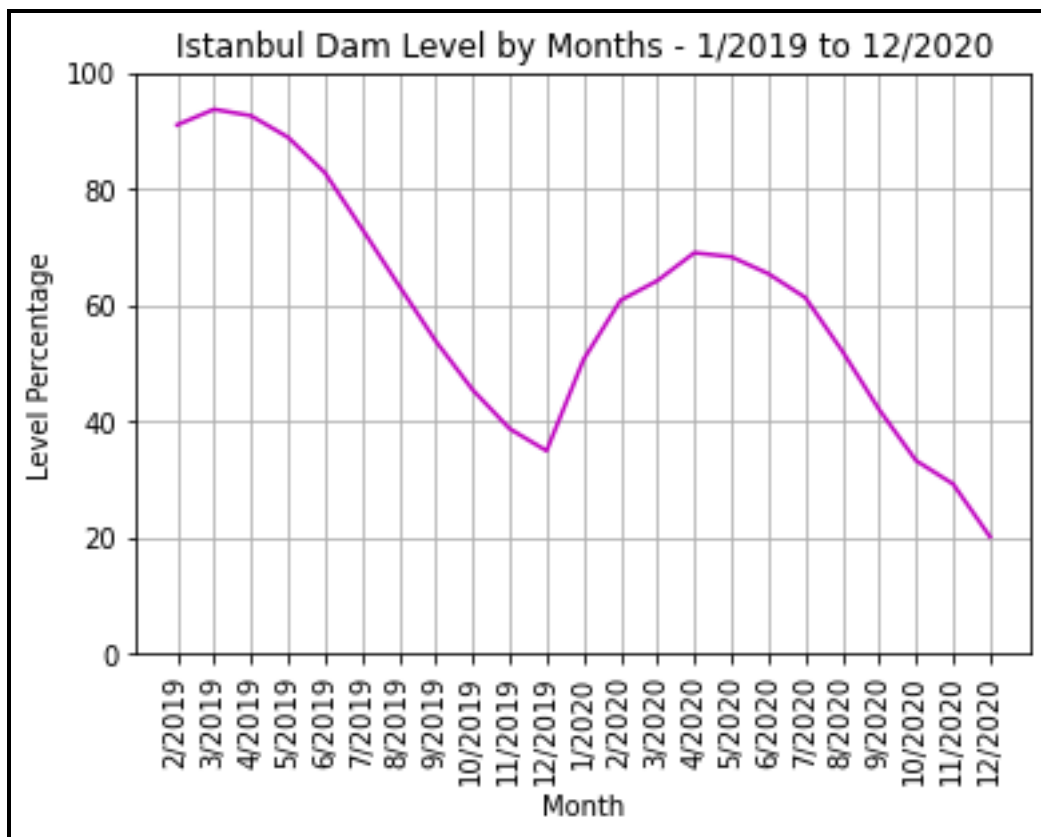
*Due: January 6, 2021, Wednesday, 23:59.*

### Plotting: Istanbul dams

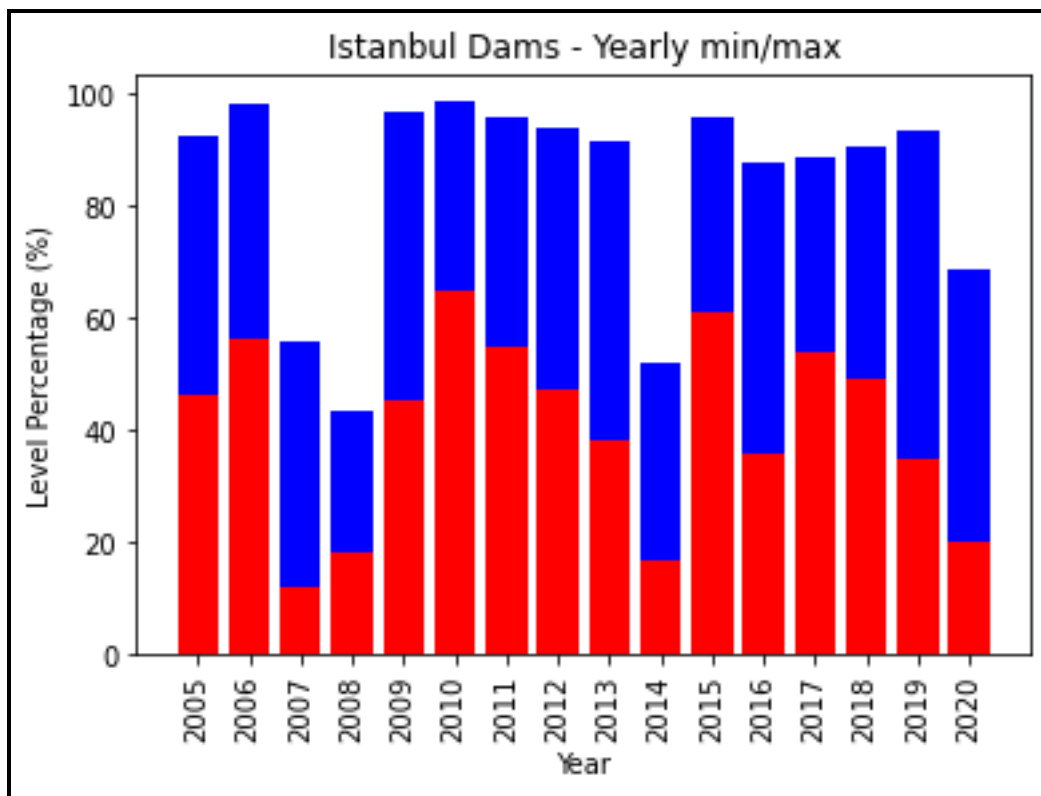
Istanbul's monthly dam water level data from 2005 to present is provided in a CSV file named *Istanbul\_Water.csv*. The data has the following columns: Month, Year and Percentage.

Write a Python program that will do the following:

- Read the data from the CSV file;
- Plot the percentage level against the each month from January 2019 to November 2020. Pay attention to the following:
  - Make the line color magenta
  - Write the month information sideways on the x-axis by using  
`plt.xticks(rotation='vertical')`
  - Make the y-axis go from 0 to 100.
  - Place the title and the labels on the axes. Place the grid lines.



- Plot the minimum and maximum dam levels in every year by creating a stacked bar chart. Note the following:
  - Stacked bar charts are built by calling the bar chart twice, first with the longer bars, then with the shorter ones.
  - Make the minimums red, maximums blue.
  - Write the year information sideways on the x-axis by using `plt.xticks(rotation='vertical')`
  - Place the title and the labels on the axes.



Name your Python py-file as **h12yourlastname.py** and then upload it to Blackboard Learn at <https://ku.blackboard.com>. Anyone e-mailing his/her homework will lose points!

*While doing all your homework assignments, remember that:*

- *You should not work together,*
- *You should not give or take any files,*
- *You should not give or take help other than simple verbal hints.*