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Math128A: Numerical Analysis

Programming Assignment #2, Due Oct. 29, 2008

Download the hourly temperatures at the City of Berkeley from `weather.com` for a 24-hour period of your choice (there are 25 temperatures from begining to end.)

- Predict the hourly temperatures for the next 24-hour period using interpolation. There is no input. your output should be one single plot, depicting the predicted hourly temperatures against the hourly temperatures for the same period from `weather.com`. This means you will need to download the next 24 hourly temperatures as well for this work.
- Predict the highest temperature during the same 24-hour period using Natural cubic splines. There is no input. your output should be one single plot, depicting the predicted temperatures throughout the 24-hour period. Make comments about your predicted highest temperature and the actual daily high from `weather.com`.

You should use titles in your plots to indicate

- the method used in the prediction;
- the date(s) of the temperature prediction.

You should also use labels to help make your plots more readable.

You are welcome to download and modify any of the matlab programs in the class website for this project.