Unless you have already done so, go to Kaggle's website and register an account, <u>https://www.kaggle.com/account/register</u>.

Read up on what Kaggle is and reflect on how you may use it in your future jobs.

Go to the following competition on house price prediction:

https://www.kaggle.com/c/house-prices-advanced-regression-techniques/overview

- 1. **[25 pts]:** Read the instructions on Kaggle. Learn (by yourself) how to join a Kaggle competition and submit your results.
- 2. **[25 pts]:** You will find that some predictors contain "missing data", NA. Figure out (by yourself) how to handle missing data in regression.
- 3. **[50pts]:** Build a regression model for house price prediction and write a report explaining how you approached the task, the steps you took, how you revised your model (**must explore both LASSO and ridge regression**) as your analyses progressed, etc. Comment on the quality of your predictions.

Include your model as an Appendix in your report. Submit the PDF of your report, and your model file(s) (R code, Excel spreadsheet, etc.)

4. **[Opts]:** On the front page of your report, include your position on the leaderboard at the time of your last submission. Please also include the screenshot showing your position on the leaderboard in the Appendix.