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| Week | Research Plan |
| 1 | Teaching materials:   * Describe the problem: predicting the post season winning probability * Introduce the past codes * Introduce the tool to scrape data from ncaa.com * Create a shared folder for codes: GitHub * Discuss the organization of the data   Homework:   * Get familiar with the scraping codes * Scrape required data from ncaa.com * Write the introduction of the problem |
| 2 | Teaching materials:   * Literature review of past models in NCAA March madness prediction * Discuss potential solution methods   Homework:   * Reading: stats book P401-415, P440 – 444, Sokol and Kvam 2006, Jacobson 2009 * Continue scraping/organizing the data * Write the literature review section |
| 3 | Teaching materials:   * Regressions: linear and logistics * Markov Chain   Homework:   * Stats book reading: P401-430, P440-444, Exercise 11-83 * Continue collecting and organizing data * Continue literature review |
| 4 | Teaching materials:   * Bayesian learning   Homework:   * Finish collecting and organizing data * Continue literature review * Writeup for Bayesian learning method |
| 5 | Teaching materials:   * Other predictive models * Construct potential model   Homework:   * Writeup for predictive models |
| 6 | Teaching materials:   * Discussion of the model   Homework:   * Start the implementation of the model |
| 7 | Teaching materials:   * Discussion of the model   Homework:   * Continue the implementation of the model * Start building the validation test |
| 8 | Teaching materials:   * Discussion of the model/testing   Homework:   * Finish the implementation of the model * Continue building the validation test * Start combining the past writeups |
| 9 | Teaching materials:   * Testing the performance of the model * Writeup instructions   Homework:   * Continue the writeup |
| 10 | Teaching materials:   * Testing the performance of the model * Writeup instructions   Homework:   * Finish the writeup |