## Practice Problems

## November 11, 2024

- 1. (Linear regression) Make sure you know how to solve these questions from Chapter 9 of Ross text book: Questions 2, 5, 13, 29, 32, 35, 43
- 2. On parametric hypothesis testing, follow the examples from Chapter 8.3.2, 8.4.2, 8.4.4, 8.6.1. There are also plenty of questions at the end of the chapter.
- 3. On non-parametric hypothesis testing, follow the examples from chapter 12.2, 12.3, 12.4.
- 4. On PCA, follow Chapter 8 in the Johnson and Wichern text book on Applied Multivariate Analysis. Example 8.1 is worked out in the book. Solve problems 8.1 to 8.6 given at the end of the chapter.
- 5. If you understand how the method works, you will be able answer the exam questions.
- 6. Rank the different robust statistic for location and scale discussed in class in terms of their break-down values and efficiency.