Problem Set 1

CPSC 640 Quantum Algorithms Andreas Klappenecker

The assignment is due Friday, September 19, before class.

Read pages xxiii-xxv, 13–27, and 60–79 in Nielsen and Chuang. Solve the following exercises in the lecture notes:

- 1. Lecture notes, Exercise 2.1
- 2. Lecture notes, Exercise 2.2
- 3. Lecture notes, Exercise 2.3
- 4. Lecture notes, Exercise 2.4
- 5. Lecture notes, Exercise 2.8
- 6. Lecture notes, Exercise 2.15
- 7. Lecture notes, Exercise 2.16
- 8. Lecture notes, Exercise 2.17
- 9. Lecture notes, Exercise 2.19
- 10. Lecture notes, Exercise 2.21