

CSC343 Worksheet 1

June 9, 2020

Note: This is student designed study guide to make learnings easier. This does not reflect the course material. Please take it only as a reference.

1. **Exercise 2.4.2:** Draw expression trees for each of your expressions of Exercise 2.4.1
2. **Exercise 2.4.3:** This exercise builds upon Exercise 2.3.2 concerning World War II capital ships. Recall it involves the following relations:

Figures 2.22 and 2.23 give some same data for these four relations. Note that unlike the data for Exercise 2.4.1, there are some “dangling tuples” in this data, e.g. ships mentioned in *Outcomes*

3. **Exercise 2.4.4:** Draw expression trees for each of your expressions of Exercise 2.4.3
4. **Exercise 2.4.5:** What is the difference between the natural join $R \bowtie S$ and the theta-join $R \bowtie_C S$ where the condition C is that $R.A = S.A$ for each attribute A appearing in the schemas of both R and S

Reference

- 1) Stanford: CS145 - Introduction to Databases, [link](#)