

CSCE 222 [Sections 502, 503] Discrete Structures for Computing
Spring 2017 – Hyunyoung Lee

Problem Set 7

Due dates: Electronic submission of *yourLastName-yourFirstName-hw7.tex* and *yourLastName-yourFirstName-hw7.pdf* files of this homework is due on **Monday, 3/27/2017 before class begins** on <http://ecampus.tamu.edu>. You will see two separate links to turn in the .tex file and the .pdf file separately. Please do not archive or compress the files. A signed paper copy of the pdf file is due on **Monday, 3/27/2017 at the beginning of class**. **If any of the three submissions are missing, your work will not be graded.**

Name: (type your name here) **Section:** (type your section here)

Resources. (All people, books, articles, web pages, etc. that have been consulted when producing your answers to this homework.)

On my honor, as an Aggie, I have neither given nor received any unauthorized aid on any portion of the academic work included in this assignment. Furthermore, I have disclosed all resources (people, books, web sites, etc.) that have been used to prepare this homework.

Signature: _____

Problem 1. (16 points) Section 6.1, Exercise 24, page 396

Solution.

Problem 2. (16 points) Section 6.1, Exercise 32, page 397

Solution.

Problem 3. (10 points) Section 6.1, Exercise 46, page 397

Solution.

Problem 4. (10 points) Section 6.1, Exercise 62, page 398. Explain.

Solution.

Problem 5. (10 points) Section 6.2, Exercise 12, page 405. Explain.

Solution.

Problem 6. (10 points) Section 6.2, Exercise 14, page 405.

Solution.

Problem 7. (10 points) Section 6.3, Exercise 20, page 413.

Solution.

Problem 8. (10 points) Section 6.3, Exercise 22 b), c), d), e), and f), page 414.

Solution.

Problem 9. (10 points) Section 6.4, Exercise 12, page 421.

Solution.

Problem 10. (Extra credit 10 points) Section 6.2, Exercise 46, page 407.
Prove the claim by contradiction (that is similar to the proof for the generalized pigeonhole principle shown in slide #18 in the lecture slides counting.pdf).

Solution.

Checklist:

- ☐ Did you type in your name and section?
- ☐ Did you disclose all resources that you have used?
(This includes all people, books, websites, etc. that you have consulted.)
- ☐ Did you sign that you followed the Aggie Honor Code?
- ☐ Did you solve all problems?
- ☐ Did you submit the .tex and .pdf files of your homework to the correct link on eCampus?
- ☐ Did you submit a signed hardcopy of the pdf file in class?