SPRING 2017: **COT 5407** Intro. to Algorithms

[Homework 5; Due Feb 21 via Email]

General submission guidelines and policies: Add the following signed statement. Without this statement, your homework will not be graded.

> I have adhered to the collaboration policy for this class. In other words, everything written down in this submission is my own work. For problems where I received any help, I have cited the source, and/or named the collaborator.

Read the handout on **Homework guidelines and collaboration policy** from your course website before you start on this homework. This is very important.
You only need to submit solutions to problems marked (**Regular**). All others are optional.

Problems

34. (**Exercise**) Solve Exercise 12.1-4 on p 289.
35. (**Exercise**) Solve Exercise 12.2-1 on p 293.
36. (**Exercise**) Solve Exercise 12.2-4 on p 293.
37. (**Exercise**) Solve Exercise 13.1-1 on p 311.
38. (**Exercise**) Solve Exercise 13.3-2 on p 322.
39. (**Exercise**) Solve Exercise 13.4-3 on p 330.
40. (**Regular**) Argue that the **black height** of a node can (or cannot) be maintained in an augmented data structure. For a precise definition of **black height**, see Section 13.1 on p 309.
41. (**Regular**) Solve 13-2 (b., c., and d.) on p 332.
42. (**Regular**) Solve Exercise 14.1-5 on p 344.