Homework 3
Out: October 27, 2015, Tuesday -- Due: November 12, 2015, Thursday, 11:59pm
EC327 Introduction to Software Engineering – Fall 2015

Total: 100 points

Submission

- ✓ Write your answers to each question area (e.g. Q1, Q2) clearly in your favorite text editor or word processor and submit a **txt, doc, or pdf** file for each file named **<username>_HW3_QX.<file extension>**
  i.e. dougd_HW3_Q1.doc
- ✓ Zip all your materials together (2 total files) and name this archive **<username>_HW3.zip**
  i.e. dougd_HW3.zip
  For example: *dougd_HW3.zip* has *dougd_HW3_Q1.doc, dougd_HW3_Q2.doc*
- ✓ Follow submission instructions on Blackboard.

Failure to follow naming conventions will cost you points.

Q1. [50 points; 5pts each]

Book problems; *these are **NOT** the programming exercise problems. Each question has the same weight.* Parentheses are for the 2nd edition versions.

1) 9.2 p. 350 (9.2 p. 304)
2) 9.10 p. 354 (9.9 p. 304)
3) 9.17p. 359 (9.15 p. 305)
4) 10.15 p. 389 (10.13 p. 341)
5) 10.17 p. 389 (10.15 p. 341)
6) 10.20 p. 392 (10.19 p. 342)
7) 11.30 p. 435 (11.20 p. 381)
8) 14.4 p. 534 (14.4 p. 477)
9) 14.12 p. 536 (14.12 p. 478)
10) 14.14 p. 538 (14.14 p. 478)

Q2. Explain the following compiler errors and why they might happen [24 pts; 2pt each]

1. "Stack overflow"
2. "Undefined reference to main" Hint: many of you see this when you break code up into various .cpp files.
3. "`fooVar' undeclared (first use this function)"
4. foo.h: No such file or directory
5. "unterminated string or character constant"
6. "ANSI C++ forbids comparison between pointer and integer"
7. "Null pointer exception" or "Segmentation Fault"
8. `cout' undeclared (first use this function)
9. parse error before `something'
10. "'member' is not accessible"
11. "Destructor name must match the class name"
12. "Friends must be functions or classes"

Q3. UML Class Diagram [26 pts]
Create the UML class diagram for the classes in PA3. Minimally indicate the class inheritance hierarchy, public, private, and protected member functions/variables, and class name. Your diagram should be organized and easy to follow. Please consider using UML creation software in-lieu of a hand drawn diagram (ArgoUML for example). References:

http://en.wikipedia.org/wiki/Class_diagram
http://argouml.tigris.org/