CSC 402-02 Assignment #4

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Original Due: 4:25 PM, Tuesday, November 23
    Extended: 4:25 PM, Tuesday, November 30
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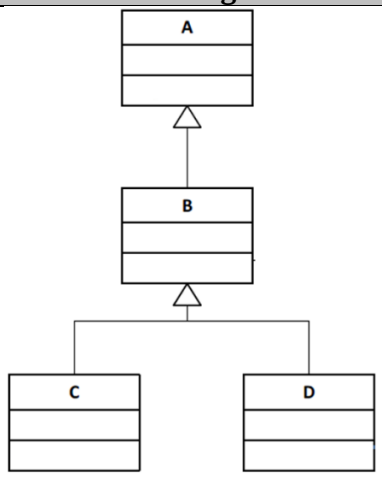
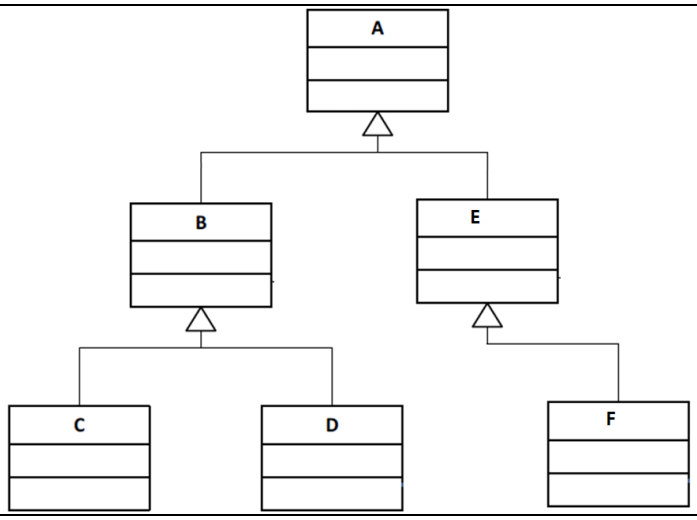
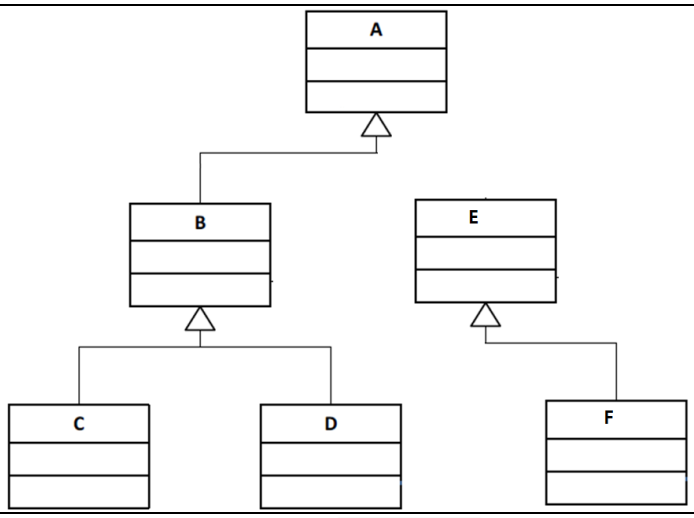
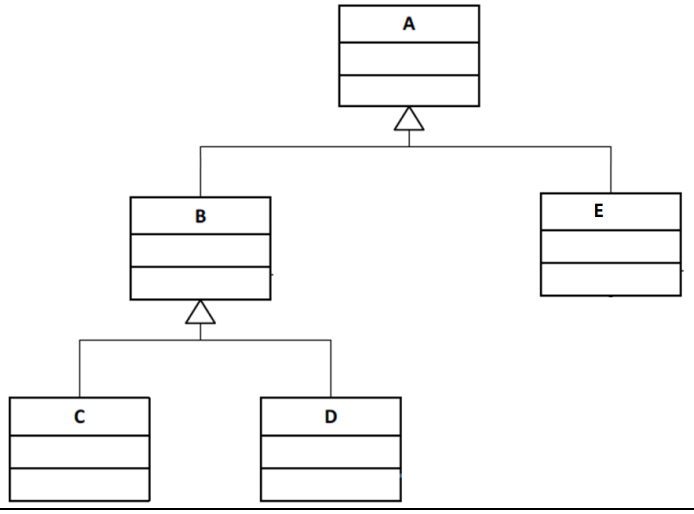
You must complete this assignment by yourself. You cannot work with anyone else in the class or with someone outside of the class. You may not copy solutions from the world wide web. The code you write must be your own.

Provided Files:

- SemanticAnalyzer.zip – a JDT project that contains a semantic analyzer

Description: Write a program that displays class inheritance relationships in a Java program. You may assume that (1) there are NOT any interfaces or nested class declarations in an input program, (2) all classes are in the same package, and (3) each class name is a SINGLE English alphabet (e.g., A, B, C). You must use the provided semantic analyzer for this assignment. Below are example class diagrams (of input programs) and correct outputs.

	Class Diagram	Output
Example 1		A B CD # #
Example 2		A BE CD F # # #

Example 3		A B CD # # E F #
Example 4		A BE CD # # #

Below describes the output rules:

- In each line, your program shall print out class names at the same level in a class hierarchy.
- Your program shall give a new line between superclass and subclasses.
- Your program shall give a blank between each set of subclasses.
- Your program shall print out a hash tag when there are not any subclasses.
- Your program shall give a blank line between distinct inheritance hierarchies.

Submission: You **RunAction.java** and **ASTVisitorEx.java** files

General Programming Assignment Requirements:

- If your program that does not compile, you will lose all points.
- If you submit the wrong file, you will lose all points.
- You must fill in the header for every file you submit. Otherwise, you will lose all points.

Checklist: Did you remember to:

- worked on the programming assignment by yourself?
- add the header in your files?
- ensure your program does not suffer a compile error or runtime error?
- ensure your program creates the correct output and that it matches the expected output exactly?
- properly indent your source code so that your indenting is readable and consistent?
- use good names for variables to make your program easy to understand?
- turn in your **RunAction.java** and **ASTVisitorEx.java** files through D2L?