Group 1:

YOU, senseii, are in command of an elite group of NINJA. You also happen to be chief programming officer (it's a very elite, but small group) and the time has come to use computers to help organize your forces.

You must come up with a program that keeps track of the status of each ninja in your group. To help you do this, take out a sheet of paper and design a ninja class. The class should include some private data about each ninja (i.e. how many throwing stars they have, how many days they've worked, name, special skill, etc), as well as member functions that you can use on each ninja object to check specific facts about each warrior. You do not have to implement the class, but you should be as specific as possible in planning out functionality.

Get to it, commander. Honor and glory await!

Group 2:

After graduating from CSE 143, you quickly rush out into the world to get a high-paying job. Since you like animals too, you apply to the Woodland Park Zoo in order to work on their computer systems.

However, they have different ideas. Instead of giving you the high-paying job you want deserve, they put you to work cleaning the elephant cages. Not cool.

So, here's your chance to show them all! You've noticed that zoo keepers in charge of taking care of the monkeys have a hard time keeping track of what each monkey likes and dislikes to eat, what they look like, etc. You decide to design a program that will keep track of all the monkeys FOR them, so all they have to do is check the computer.

To help you do this, you need to design a monkey class. The class should include some private data about each monkey (i.e. what they look like, what they like to eat, how much they eat, health, location, etc. . .) as well as member functions to access this data, do comparisons, etc. You do not have to implement the class, but you should be as specific as possible in planning out functionality.

This is your time to shine—ANYHTHING is better than cleaning elephant cages!

Group 3:

After finishing CSE 143 as a proud member of Section AB, you decide that the ONE aspect of the University that needs MAJOR help is the department that assigns rooms to quiz sections. Instead of heading on down there with a baseball bat, you decide to step in with your new skills and help.

Your goal is to create a program that will keep track of the status of each room on campus. To do this, you need to design a room class. The class should include some private data about each room—i.e., has it been assigned, current class if it has been assigned, location in building, location on campus, times available, whats in it, etc—as well as some member functions that will allow the user of this class to access and manipulate this data. You must decide what functionality to provide the user of your class. You don't have to implement it, but be as specific as possible!

Good luck! As you well know, anything you do will be an improvement. . .

## Group 4:

You're the lead on a design group for a brand new action game, Return of the Flying Monkey. This game is so spectacular and looks so good its sure to be a success. All that remains is to decide how to keep track of the game characters.

As the lead of the project, you choose to take care of this yourself. Your goal is to design a class that will provide functionality to test where the character is, what its doing, whether its alive, and anything else that you think will be useful. This will of course involve deciding what private data to include in order to be able to do these tests.

Your class should be completely designed, but don't worry about implementing it. Get to it, Master of the Flying Monkies. . .lets get your game out the door so you can get rich!

Group 5:

After graduating from CSE 143, you decide that Computer Science, even though it's the most amazing subject ever, is simply not for you. So, in order to get rich quick, you turn to the one profession that will make you the most money: selling peanuts during Mariners games at SafeCo field!

However, even though you're making huge amounts of money selling vastly overpriced peanuts to fans, you realize that you're beginning to lose track of what kinds of peanuts you have, whether or not they're roasted, your prices for each type, how many you have, etc. Since you DID get a good grade in CSE 143, you decide to make a computer program to keep track of these things for you.

In order to write your program, you're going to need to design a peanut class. This should keep track of what kind of peanut it is, how much it costs for you to buy and roast, how much it costs for each person you sell it to, how far you can throw a bag of these, and any other information you think will be useful. You do not need to implement this class, but you should design its functionality thoroughly.

Get to it, Peanut Man, the ballgame awaits!

## Group 6:

After surviving your CSE 143 class, you end up doing SO well that the Computer Science department asks you to *teach* the next one! Wow! Of course, you accept, because this means that you'll be Steve's boss. And, well, he'll get whats coming to him.

Since you ARE a computer genius, you decide that for YOUR version of CSE 143, you'd like to have a computer program that keeps track of each student. You want to make it really easy for you to enter grades, comments, student number, test scores, quiz section, and any other pertinent data for each student. So, as part of this computer program, you need to design a CSE student class. This class should contain any or all of the above information as well as provide means to use this data via member functions. You do not have to implement the class, only design it completely on paper.

Get to it, Professor! Your class isn't going to wait!