

The University of Melbourne
Department of Computer Science and Software Engineering
433-254 Software Design
Semester 2, 2003

Lab 5
Week 6

1. Write a program to extract a portion of a character string and print the extracted string. Assume that m characters are extracted, string starting with the n th character.
2. Write a program that accepts a shopping list of five items from the command line and stores them in a vector.
3. An Australian awards some grace marks to students who participate in the national games. Therefore, total marks awarded = Exam_Marks + Sports_Grace_Marks. If total marks scored are greater than maximum marks, then the final marks awarded will be equal to the maximum marks. An OO-based implementation will contain a class called Results, which extends a class called Exam, which itself extends a class called Student. It will also contain an interface called Sports, which is implemented by the Results class. The Results class will be responsible for computing the final marks scored by the students. Write a Java program along with an interactive driver class.

Note: The above design is based on the lecture 2, Week5. However, as an alternative design, class Student may have up to 10 instances of class Results (an array), where class Results may have one instance of class Exam and implement interface Sports. Class Results will have the responsibility of working out the final marks scored by a student according to his/her exam mark. Also, a student should be able to answer queries about each of his/her results.