

Microsoft Excel 2007 Chapter 5 – Lab Test A

Filtering a Course Roster and Grade Book List

Purpose: To demonstrate the ability to find records that pass a test using a data form, and to filter a list using the AutoFilter and Advanced Filter commands.

Problem: You are the lab assistant of the Chm 101 Intro to Chemistry class. The instructor wants you to make a grade book list, which will consist of labs, a quiz, and an exam. He wants to see which students have taken the introductory math course, the computer literacy course, and the introductory physics course. You will create three columns for these courses and fill the columns with Y for yes or N for no.

Instructions: Perform the following tasks:

1. Create the list shown in Figure E5A – 1 beginning in row 6 of the worksheet. Make row 6 23.25 points high. The title row should have an aqua background. The column headings, name column, and Average row should have a light yellow background. Rename the tab for Sheet 1, Chm 101, and delete Sheets 2 and 3. You will create the Exam1 grade column in the next step.
2. Create a grade table as shown in Figure E5A-1. Name the range M6:N12 table. Add a vlookup to create the exam 1 grade column. Note: calculate the % as exam 1/50.
3. Name range A7:J18 using the name, Database.
4. Sort the records in the list in ascending sequence by name. Print the sorted version.
5. Click Form on the Data menu. Use the Criteria button on the data form to find the records that pass the following comparison criteria. List and submit the names of the students who pass the comparison criteria for tasks 5a through 5d below.
 - (a) Find all students who have taken Phy 101.
 - (b) Find all students who have a grade less than the average of Lab 2.
 - (c) Find all students who scored 9.0 or higher on Lab 1 and took Math 100.
 - (d) Find all students who scored 11.0 or less on Quiz 1 and scored less than 45 on Exam 1.
6. Close the form.
7. Use the AutoFilter to find records that pass the tests in tasks 7a through 7d below. Print the spreadsheet for each problem. Be certain to start with Show All for problems b, c, and d.
 - (a) Find all students who did not take Phy 101 and scored more than 11 on Quiz 1.
 - (b) Find all students who took Math 100 and Phy 101 and scored 45 or less on Exam 1.
 - (c) Find all students who scored greater than 7.5 on all three lab assignments.
 - (d) Find all students who did not take Math 100 and Phy 101 and scored more than 45 on Exam 1.
8. Display all records and use the AutoFilter menu to remove the arrows. Save the workbook list using the file name, Yourname - Excel Chapter 5 – Lab Test A, where Yourname is your own last name.
9. Add a Criteria Area to the top of the worksheet by copying the column headings to row 2 as shown in Figure E5A – 2. Make the background color light blue for row 1, and make it 23.25 points high. Insert a border under the column headings in row 2. Use the formula bar to define the appropriate range with the name, Criteria Area.

10. Add an Extract Area to Cell ranges A22:I23. Use the formula bar to name the range A23:I23 Extract. Make row 22 a height of 23.25 points and change the font size to 20.
11. Use the Advance Filter command on Data tab to extract records that pass the test in tasks 10a through 10d below. Print the extracted records after each extraction.
 - (a) Find all students who did not take Math 100 and scored more than 12 on Quiz 1.
 - (b) Find all students who took Cis 204 and Phy 101.
 - (c) Find all students who scored more than 7.5 on Lab 1 and Lab 3.
 - (d) Find all students who scored less than 8 on Lab 3 and scored more than 40 on Exam 1.
12. Re-sort the records in the list in descending sequence by Exam 1.
13. Save the workbook using the file name Yourname - Excel Chapter 4 – Lab Test A2, where Yourname is your own last name. Print the worksheet.

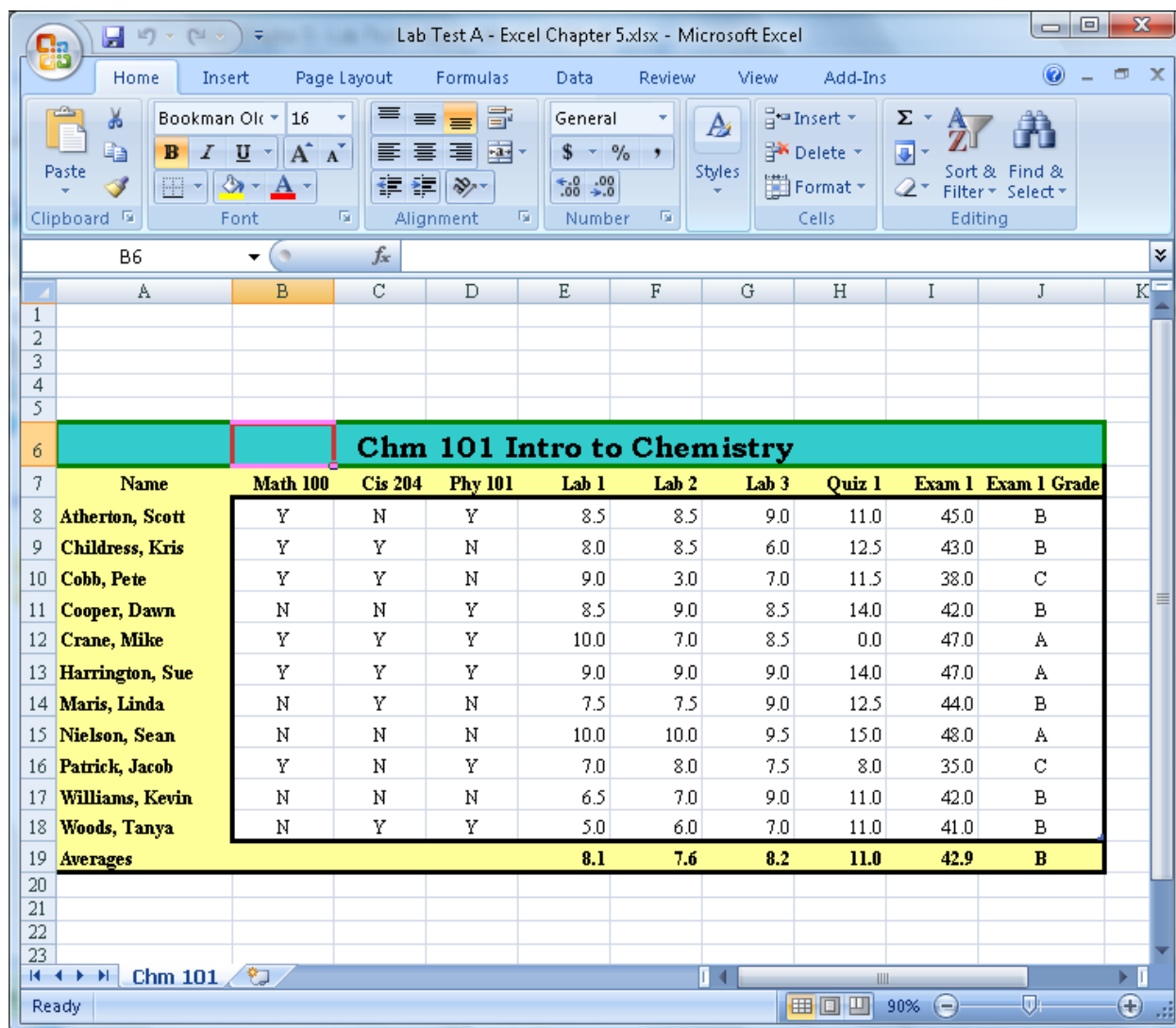


Figure E5A – 1

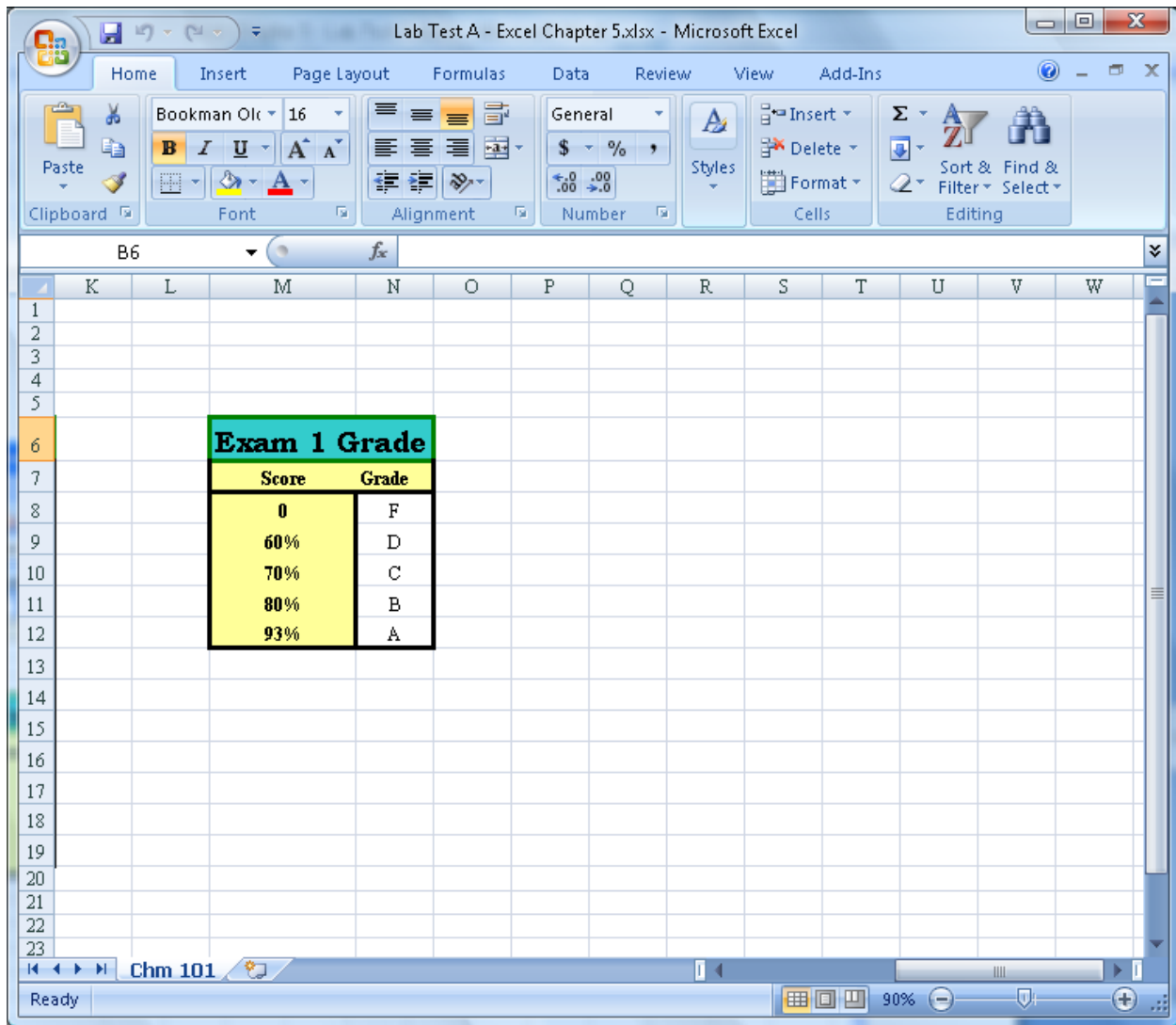


Figure E5A – 1

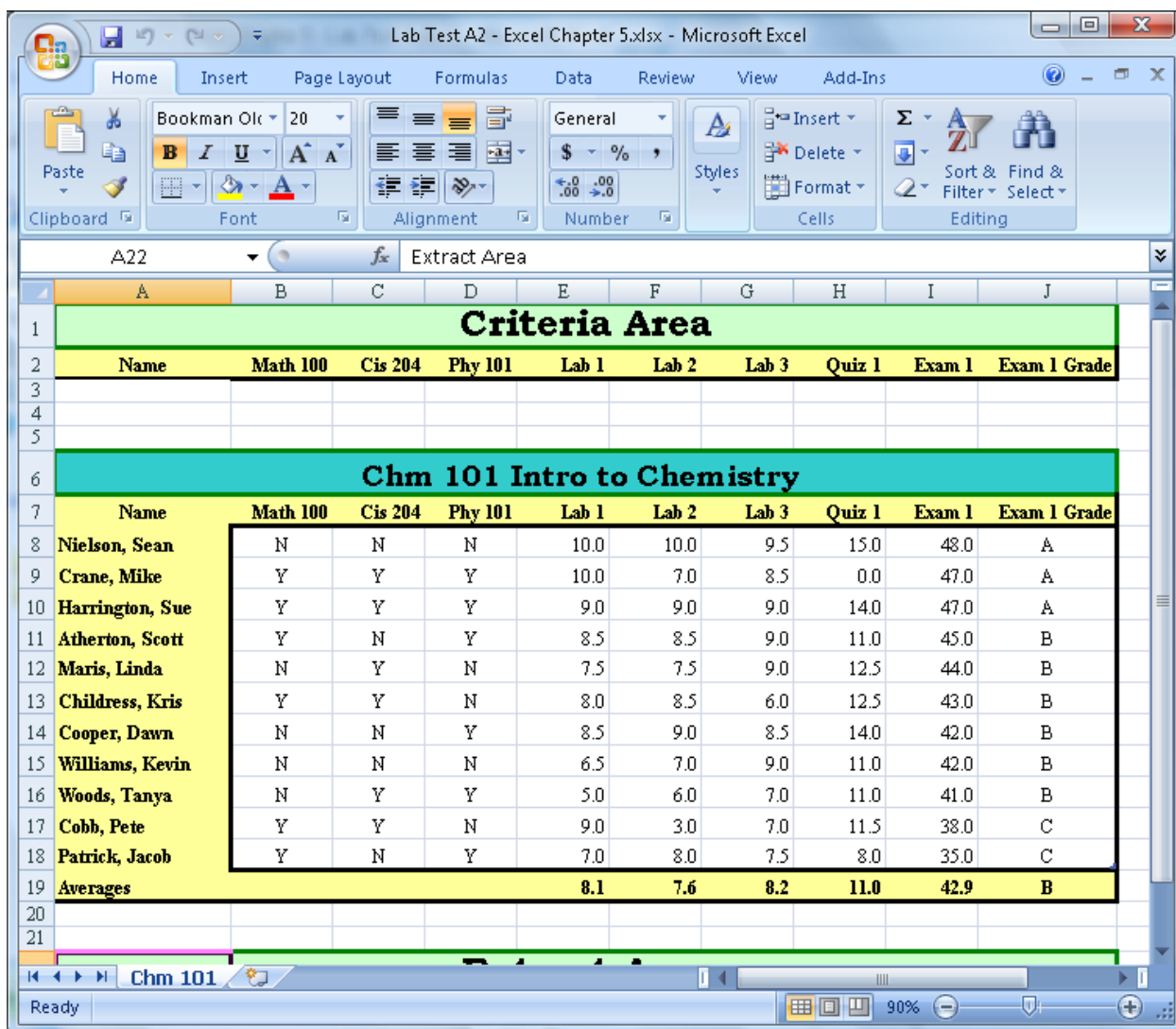


Figure E5A – 2