

Chapter 8

Lesson 1 Worksheet 1

A grading curve is sometimes implemented to adjust test scores based on the best score or the average score. This is often done when a test is difficult for a class as a group, with all students scoring well below the expected. A curve can be as simple as adding a specific number of points to each score to bring the average score up.

Create a CalculateCurve application that prompts the user to enter a desired average and a set of student scores as a string of values with each score separated by a comma and a space. For example, a set of three scores would be typed as: 65, 72, 70 Clicking the Calculate Curve button displays the current average and the number of points that should be added to each grade to achieve the desired average. If no curve is needed, then the current average and "No curve needed." is displayed.

- a) Create the interface and appropriately name all objects.
- b) Write the application code. Note that the string of grades should be broken into separate grades for averaging. The `String` class includes a method that is used to break apart a string into an array:
 - **Split(separator)** breaks apart a string into array elements with each element designated by a separator in the string. *separator* can be one or more characters enclosed by quotation marks.
- c) Run the program and print the application code.