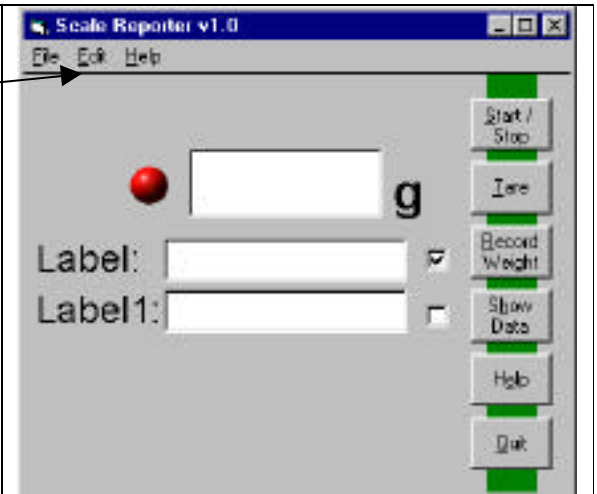
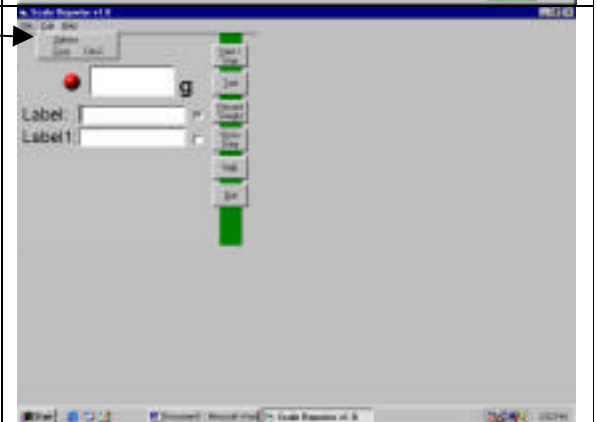


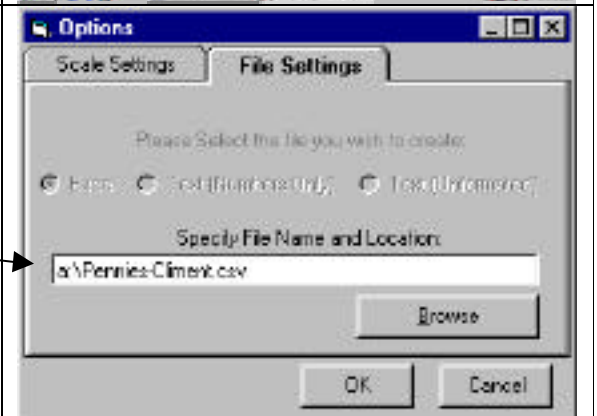
1. When you click on the Icon on the Desktop the screen on the right should appear.
2. As a first step, click on Edit.



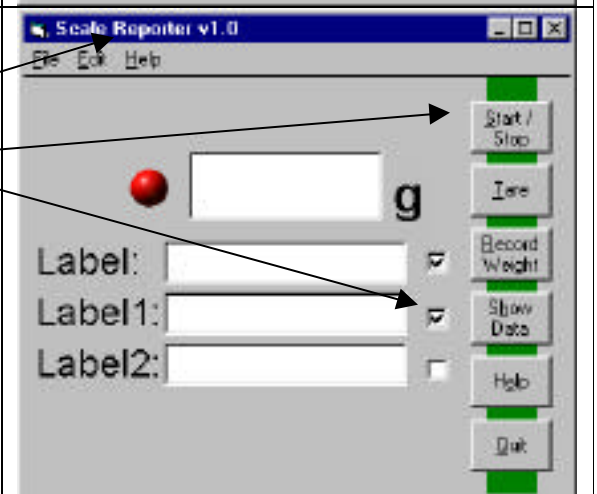
3. Now click on options.



4. You must now type in the file in which you want to save your data. You should use the convention shown to name your file (a:\Pennies-Climent.csv). The “a:” stands for the floppy drive. The “Pennies-Climent” identifies the assignment and the user. Finally, the “csv” extension is necessary for this application.

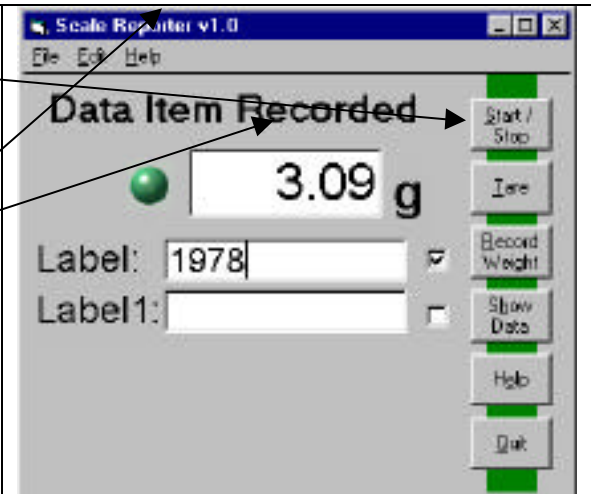


5. **Note:** Clicking on the Label1 box is supposed to allow you to use additional labels, but this function is not working correctly at this time.
6. To start the scale, click on the Start/Stop Button.
7. The ball on the left of the screen will change color from red to green when the scale is ready.

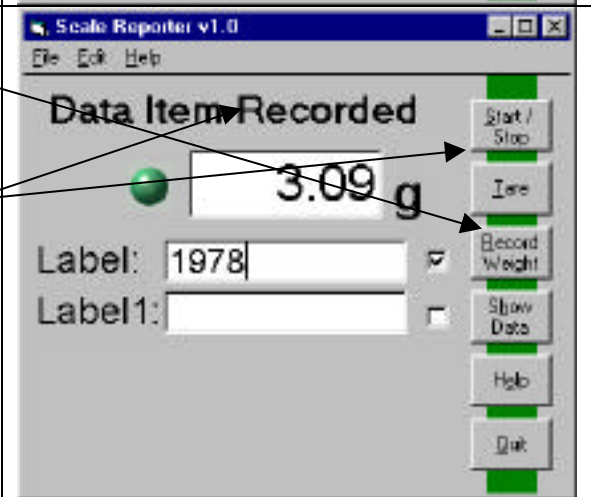


For this example you are supposed to record the weight and date.

- 8. When there are no items on the scale the weight displayed should read zero. If it does not that click on the Tare button to adjust the scale to zero. Here a 3.06-gram penny is on the scale and its date is 1978.
- 9. When you put an item on the scale, the computer automatically reads its weight. There is often a few seconds delay for the new weight to be recorded.
- 10. You can put in a label for each item. In this example you want to record the year 1978.

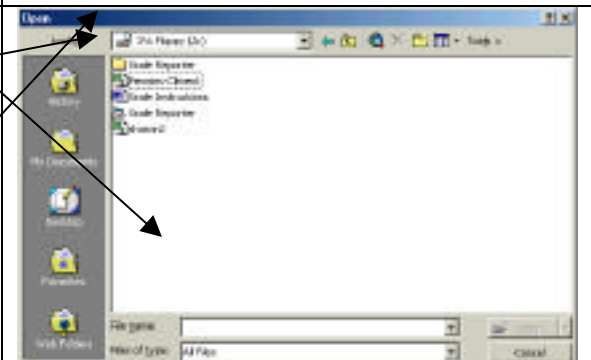


- 11. You are now ready for the computer to record the weight along with its label. To do this, click on the Record Weight Button.
- 12. You will know that you data has been recorded when the statement **“Data Item Recorded”** flashes on the screen for a couple of seconds.
- 13. There are two main errors that are sometimes made with this program. Sometimes an individual will put an item on the scale without changing the label. Also, sometimes individuals forget to record the data.

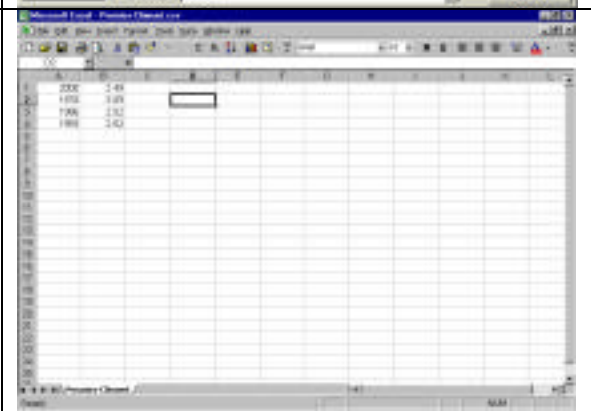


- 14. When you are finished recording all your data click on the Quit button.

- 15. You can view your data, by opening up your "csv" file in Excel. First make sure that you have chosen the A drive.
- 16. Make sure that the Files of Type box says "All Files".
- 17. Now all you have to do is double click on you file, which in this case is "Pennies-Climent.csv".



- 18. When you open up your Excel spreadsheet you should have two columns of data. The first column is the year and the second column is the weight in grams.
- 19. Inspect your data carefully. Make sure that the number of entries matches the number of items weighed. Sometimes you record the same item twice. When this happens, you have the same year and weight recorded in two successive rows. You can simply delete bad or duplicate items on your spreadsheet. Also make sure that you haven't recorded any weights of zero or obvious outliers.



Pennies Dataset:

1. Weigh 25 pennies (not all new ones) recording the year (as a label) and corresponding weight.
2. Pay close attention to make sure you change the year and the penny before you record each observation.
3. Check your data for errors and repeat observations and clean it up so that the data is accurate. If you keep a hand written log of the years in the order you recorded the data, this may help you with this task.
4. Put your last name in column C on your spreadsheet.
5. Save your data as an Excel file using the following convention: 'Pennies-YourLastName'.
6. Email your corrected data to John Climent as an attachment. Make the subject 'Pennies Data'.
7. Draw a Histogram of your pennies data (see Chapter 3 homework).
8. Draw a time series graph for the frequency of pennies for your data (see Chapter 3 homework).
9. Draw a box plot for your data of the "old" and "new" pennies. Both box plots must be on the same graph. No credit will be given for separate individual box plots. (See Chapter 4 homework.)
10. Draw a scatter plot of your data set using year as the explanatory variable and weight as the response variable. (See Chapter 5 homework.)

Peanut Dataset:

1. There are peanuts available in the Math Lab for this exercise.
2. Take a scoop of approximately 25 peanuts.
3. Some peanuts are of the one-nut type, but two-nut types are more common. Do not use any peanuts that are obviously broken (i.e. ones with holes in them) or ones with three or more nuts.
4. Weigh each peanut recording the type (1 = one-nut, 2 = two-nut) and the corresponding weight.
5. Pay close attention to make sure you record each observation correctly.
6. Return the peanuts to the Math Lab or keep them. Do not put the back with the peanuts to be weighed by other students. Sampled peanuts should not be re-sampled by other students.
7. Put your last name in column C on your spreadsheet.
8. Save your data as an Excel file using the following convention: 'nuts-YourLastName'.
9. Email your corrected data to John Climent as an attachment. Make the subject 'Nuts Data'.