Managing the Stat Editor

Concepts

- Manage lists effectively

Materials

- TI-84 Plus

Overview

This activity gives participants an overview of managing the Stat Editor feature of the TI-84 Plus. This includes naming lists, clearing versus deleting lists, performing operations with lists, sorting grouped lists, and using the SetUpEditor.

Procedure

1. Opening the Stat Editor:
   - Press [STAT] [ENTER] to choose 1:Edit. The Stat Editor will open. See Figure 1.

2. Clearing data from an existing list:
   - Press [▲] to move the cursor to the top of the list as shown in Figure 2.
   - Press [CLEAR] [ENTER].
   - To clear L2, follow the same procedure. Use the arrow keys to move the cursor so that it is on top of list L2. Then press [CLEAR] [ENTER].
   - When data are deleted from a list, they are no longer available unless the data were included in a group or a program.

3. Clearing all the lists (including named lists) at one time:
   - WARNING: It is possible to clear the data from all existing lists at one time, but be **absolutely sure** that you really want to clear all the lists.
   - To clear all the lists at one time, press [2nd] [+] (for [MEM]).
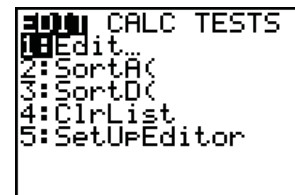   - Select 4:ClrAllLists, and press [ENTER]. See Figures 3 and 4.

Figure 1

Figure 2

Figure 3

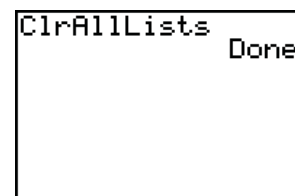**Figure 4**

4. Deleting a list from the Stat Editor:
   - If DEL is pressed rather than CLEAR, the list is moved from the Stat Editor screen but remains in the memory of the calculator. See Figure 5.
   - When a list is deleted from the Stat Editor, the data remains intact and may be brought back into the Stat Editor. See step 5.

5. Bringing back lists that have been deleted from the Stat Editor:
   - Press STAT. Note that under the Edit menu, choice #5 is SetUpEditor. See Figure 6.
   - Select 5:SetUpEditor by pressing 5 or scrolling to the option and pressing ENTER. SetUpEditor appears on the home screen.
   - Press ENTER to execute this command and return all lists in the Stat Editor to their default state (L_1 through L_6).
     - In Figure 7, all the lists have been deleted.
     - In Figure 8, the SetUpEditor has been executed.
     - Figure 9 shows the Stat Editor restored to its default state.

6. Displaying specific lists:
   - As shown above, using the SetUpEditor restores **all** default lists L_1 through L_6. See Figure 9.
   - To display **specific** lists you choose, follow-up the SetUpEditor command with a list of names separated by commas. For example, press 2nd 1 , 2nd 2 to paste the names 'L_1' and 'L_2' onto the screen. See Figures 10 and 11.

Note: If you enter the list name by pressing the ALPHA key and typing L and 1, rather than pressing 2nd 1, the calculator does not recognize it as the L_1 list.

Figure 5
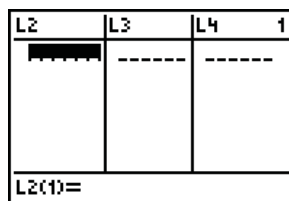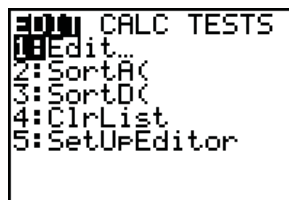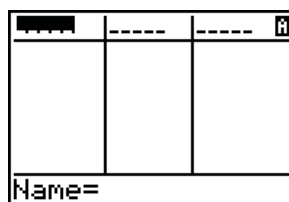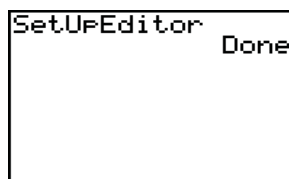

Figure 6

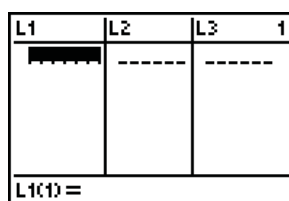

Figure 7
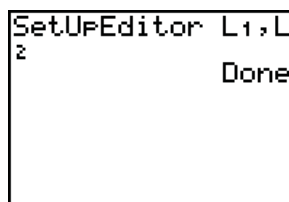

Figure 8

Figure 9
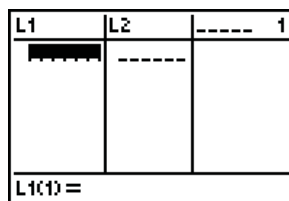

Figure 10

Figure 11

7. Naming a list:
   - List names may have up to 5 characters.
   - To enter a list with a unique name into the Stat Editor, move the cursor up to the top of the screen so that it is on top of the name L1.
   - Press [2nd] [DEL] (for [INS]) to insert a new list. Notice the mode has been changed to ALPHA mode as denoted at the bottom of the screen. See Figure 12.
   - Type the name of the list, and press [ENTER]. See Figure 13.

Figure 12

Figure 13

8. Sorting a group of lists:
   - Be especially careful when working with data that are related. For example, suppose data are collected on students' age, grade in school, and GPA. See Figure 14.

   - To sort the data by GPA in descending order, and keep the related data together, press [STAT], and select 3:SortD(to paste the command SortD(on the home screen. See Figure 15.
   - Press [2nd] [STAT] to open the LIST menu. Scroll down the list of names to 'GPA', and press [ENTER].

   - Then in the same statement, list the related list names separated by commas. Close with a right parenthesis. See Figure 16.

   - Press [STAT] [ENTER] to view the sorted data. See Figure 17.
   - Sorting related data requires you to first list the data that is to be sorted followed by the list(s) that are to be carried along with it. Be sure to separate the names of the lists with commas.

Figure 14

Figure 15

Figure 16

Figure 17

9. Using List Formulas in the Stat Editor:

- The Stat Editor lists behave just like columns in a spreadsheet. Thus, we can perform operations with lists just as we perform operations with columns in a spreadsheet.

- To copy the data in L_1 to L_2, use the arrow keys to move the cursor to L_2 at the top of the screen. Then press $\boxed{\text{2nd}}$ $\boxed{1}$ (for L_1). See Figure 18.

Figure 18

- Press $\boxed{\text{ENTER}}$. L_2 is now equal to L_1. See Figure 19.

Figure 19

- To add L_1 and L_2, define L_3 to be $L_1 + L_2$. To define L_3, move the cursor to the top of the screen, and press $\boxed{\text{2nd}}$ $\boxed{1}$ $\boxed{+}$ $\boxed{\text{2nd}}$ $\boxed{2}$ $\boxed{\text{ENTER}}$. See Figures 20 and 21.

- To define any list in terms of any other list(s), use the list name(s) just as you would any variable(s).

Figure 20

Figure 21

- Note that if you change a value in L_1, the value in L_3 does not change. See Figure 22.

- You can attach a formula to a list so that the resulting list is updated when an element in a list is changed or when a formula is changed. To attach a formula to a list, enter the formula in quotation marks.

Note: The symbol at the top of the list indicates that L_3 is attached to L_1 and L_2 with a formula-lock. See Figure 23.

Figure 22

Figure 23

- Change a value in L1, and note that the value in L3 updates to reflect the change. See Figure 24.
- There are several methods to detach a formula from a list, two of which are:
  - o Edit an element of the list in which the values are dependent on other lists (in this example, L3). Put the cursor on an element in the list, and press ENTER. Then, enter a different value, and press ENTER to store the value. This will detach the formula.

  or

  - o Move the cursor onto the name of the list to which a formula is attached, and press ENTER CLEAR ENTER. All list elements remain, but the formula is detached and the lock symbol disappears.

Figure 24