**CHAPTER**

*12*

# Entering Data Interactively

## Chapter Overview

This chapter describes how to create and enter new data both in a tabular format and one row (record) at a time. The Edit/Browse functions described in Chapter 7, "Editing and Browsing Data," on page 73 show how to add new data to an existing table, whereas this task enables you to enter new data in a newly created table.

This chapter shows you how to create a table called SALES and how to enter the first five months of gross sales data.

### Additional Information

For more information on the FSVIEW and FSEDIT windows, see the online help for those windows.
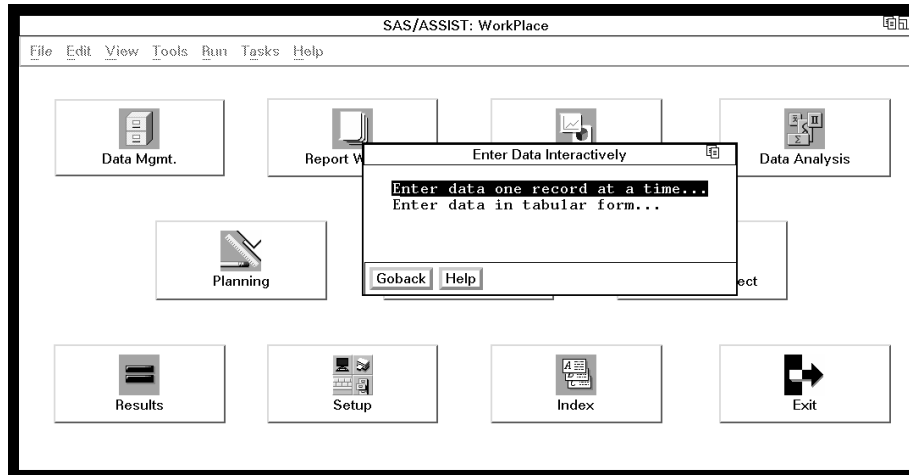
## Entering Data

### Instructions

To enter data interactively, follow this selection path:

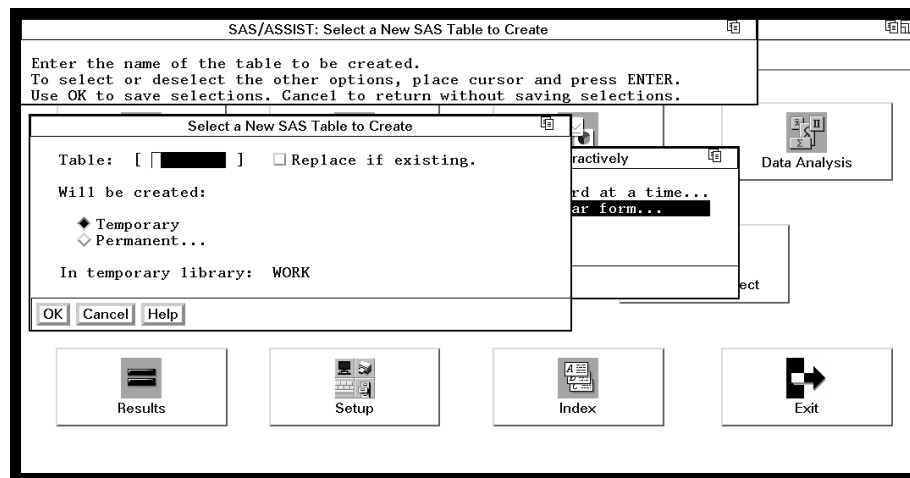| Tasks | ▶ | Data Management | ▶ | Create data | ▶ | Interactively... |

The Enter Data Interactively window appears.

**Display 12.1** Enter Data Interactively Window



## Entering Data in a Tabular Format

1 Select `Enter data in tabular form...`. The Select a New SAS Table to Create window appears.

**Display 12.2** Select a New Table to Create Window



2 In the `Table` field, type `SALES` as the name of the table that you want to create for the new data. Refer to "SAS Tables" on page 113 for information about table naming conventions.

3 You can store the table temporarily or permanently. For this example, store the table temporarily.
   □ If you want to store the data only for the duration of the SAS session, select `Temporary`. The data is stored in a temporary table called WORK.SALES, which is deleted when you end the SAS session.
   □ If you want to store the data permanently, select `Permanent`. A list of existing librefs appears. Select the libref for the location where you want to

store the data, for example, the SASUSER libref. The table SALES is stored in the SASUSER library and remains there until you delete it.

**4** Select **OK**. The Define a New SAS table window appears.

*Note:* **Replace if existing** enables you to replace the existing table with a new table of the same name. If the SALES table already exists, you get an error message stating this. You may either enter another name for the table or select **Replace if existing** to replace the existing table.  △

**Display 12.3**   Define  a New SAS Table Window
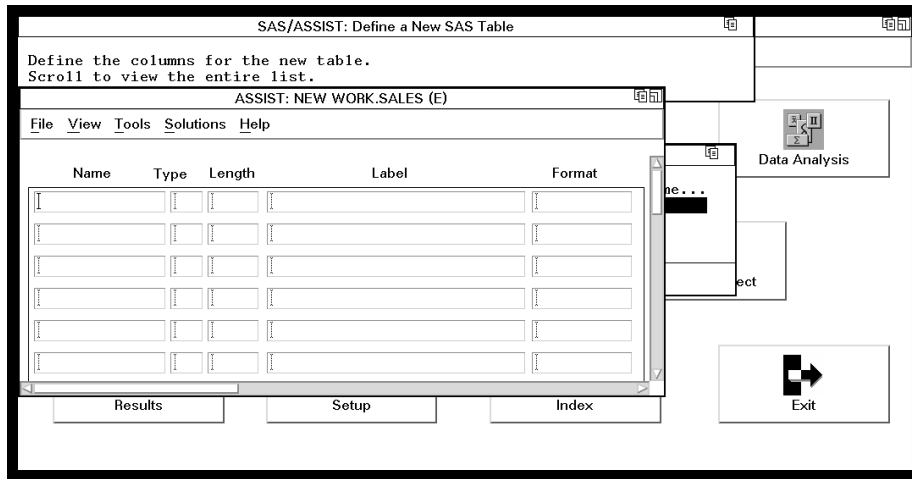


**5** In the **Name** field, type **MONTH** as the name of the first new column.

**6** In the **Type** field, type a **$** or a **C** to indicate that the column is a character column.

A column can be character or numeric. If a column is defined as character, it can contain letters, numbers, special characters, and symbols, but it cannot be used in arithmetic calculations. A character column is indicated by a **$** or a **C** in the **Type** field.

If a column is defined as numeric, it can contain only numbers, decimal points, plus signs, and minus signs, and it can be used in arithmetic calculations. A numeric column is indicated by a blank or an **N** in the **Type** field.

**7** For the length, type **3**. Each character uses one byte. The length indicates the number of bytes used to store each of a column's values in a SAS table. A character column can have a length from 1 to 32767.

**8** For the label, type **Sales Month**. The label is a description of up to 40 characters that can be printed by certain tasks instead of, or in addition to, the column name.

**9** In the second row of the **Name** field, type **GSALES** as the name of the second new column.

**10** Leave the **Type** field blank to indicate that the column is numeric.

**11** For the length, type **8**. A numeric column can have a length of 2 to 8 bytes or 3 to 8 bytes, depending on your operating environment. If you leave this field blank, it will use a length of 8 by default.

**12** For the label, type **Gross Sales**.

**13** In the **Format** field, type **dollar8.2** and press ENTER. A *format* is a pattern that the SAS System uses to determine how a column value should be displayed. The SAS System provides a set of standard formats and also enables you to define your own custom formats. The **dollar8.2** format inserts a dollar sign before each
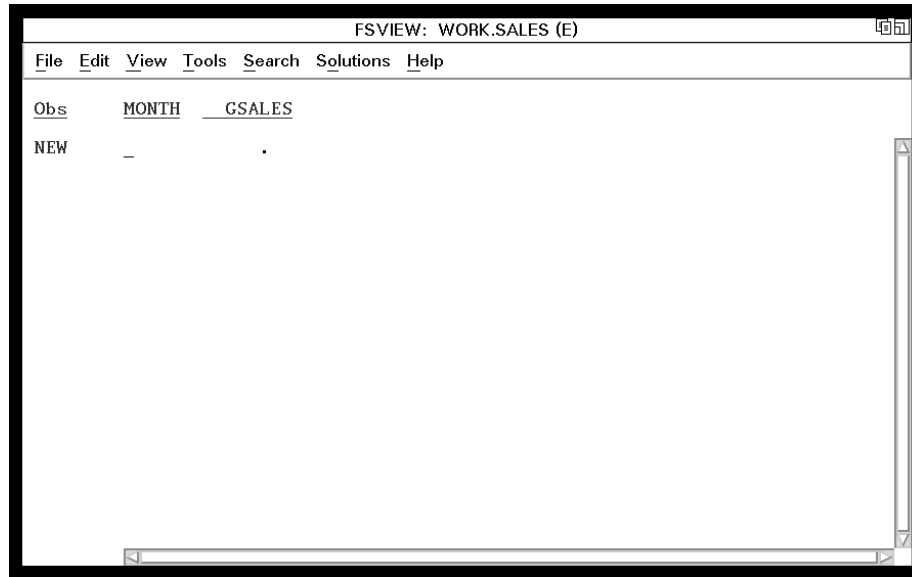
entry, inserts commas for numbers greater than 999, and writes a decimal point and two decimal digits.

**14** Follow this selection path:

| File | ► | Close |

A prompt appears to ask you if you want to save changes to the **WORK.SALES** table. Select **Yes**. The FSVIEW window opens to let you type new data for the columns you just defined.

**Display 12.4**   Typing Data into WORK.SALES



Each row in the window represents information for each sale. Each column represents a particular type of data for the sales. When you type data in a tabular format, multiple rows are shown in one window.

**15** Type data in each field, and press TAB to move from field to field if necessary. For example, type **JAN** for the month and **3051.20** for the first GSALES entry.

When you have typed one row of data, press ENTER and another NEW row appears. The format you just specified also adds the dollar sign and comma to the amount of sales when the data appears. Type the rest of the data as shown here:

```
FEB    2813.50
MAR    3214.80
APR    3471.00
MAY    3943.70
```

Use the scroll bars or the BACKWARD, FORWARD, LEFT, and RIGHT function keys to see all the columns and rows.

*Note:*    If you make an error while typing the data, position the cursor on the row you want to edit and press ENTER. The row of data is highlighted to indicate that it is selected. To edit the data, press TAB to move the cursor to the data you want to change, and type the new data over the old data. To edit another row, repeat these steps.  △

Refer to Chapter 7, "Editing and Browsing Data," on page 73 for more information about editing data.

**16** When you have finished entering rows, follow this selection path to exit the FSVIEW window:

File ► Close

Refer to Chapter 7, "Editing and Browsing Data," on page 73 for instructions on editing and browsing the data you just entered.

## Entering Data One Row at a Time

Follow this selection path:

Tasks ► Data Management ► Create data ► Interactively...

Follow steps 1 through 14 in "Entering Data in a Tabular Format" on page 122 except, in step 1, select `Enter data one record at a time...` from the Enter Data Interactively window. In step 2, name the table `SALES2`.

After you have defined your columns, select `Close` from the `File` menu, and then select `Yes` to save the changes to the table. The FSEDIT window appears for the first row with the word New at the top of the window.
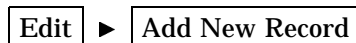
**Display 12.5** Entering Data into WORK.SALES2
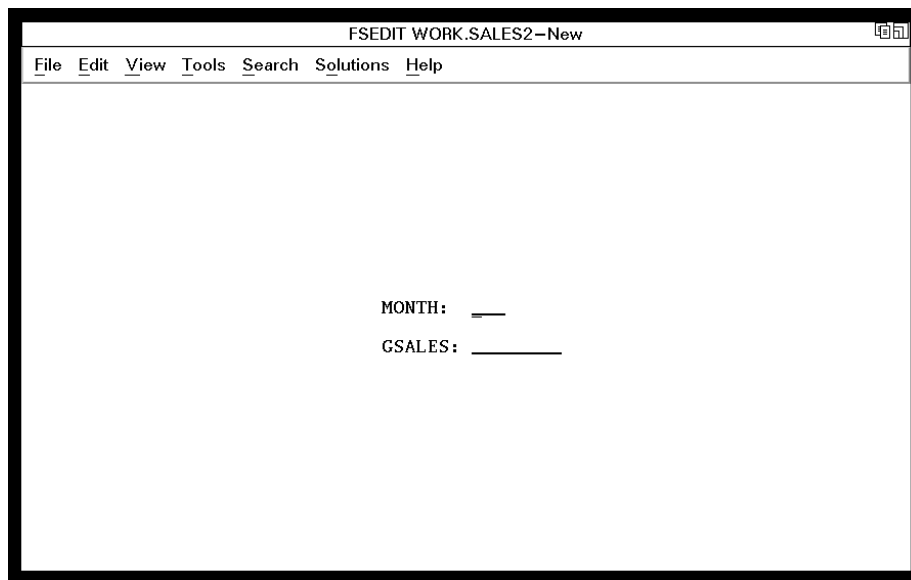


**1** Type the following data in each field, and press TAB to move from field to field if necessary:

```
JAN    4339.20
```

When you have typed in one row of data, press ENTER, and the dollar sign and comma are added to the amount of sales.

**2** To add the next new row, follow this selection path:

Edit ► Add New Record

A blank row appears with the word New in the upper right corner of the window. Continue to add new rows to add the following data:

```
FEB    3482.50
MAR    4238.80
APR    3529.00
MAY    3433.70
```

To view other rows you have already added, select `View` from the menu bar and use the items as described here:

☐ Select `Next Observation` to move forward to the next row.

☐ Select `Previous Observation` to move backward to the previous row.

☐ Select `Observation Number...` to move to a specific row. The Observation Number... window appears. Type the number of the row you want to display and select `OK`. The row you requested appears.

☐ If you have too many columns to fit on one screen, each row has as many screens as necessary to display all of the columns for the row. Use `Next Screen` and `Previous Screen` from the View menu to move from screen to screen within a row.

**3** When you have finished entering data, follow this selection path to exit the FSEDIT window:

| File | ► | Close |

Refer to Chapter 7, "Editing and Browsing Data," on page 73 for instructions on viewing and editing the data you just entered.

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