

Chapter 3

Managing Results in Projects

Chapter Table of Contents

Introduction	55
Managing Projects	55
Creating a Project	55
Saving a Project	56
Saving a Project Under Another Name	57
Renaming a Folder	57
Deleting Nodes from a Project	58
Deleting a Project	58
Opening Existing Projects	59
Using Code	59
Viewing Code in the Code Window	59
Copying Code to the Program Editor Window	60
Printing and Saving Results	60
Saving Text Results	60
Saving a Graph Result as a File	61
Saving a Result as a Catalog Entry	62
Printing Results	63
Example: Create and Export Histograms	64
Open the Project	65
Save the Project Under Another Name	65
Generate Histograms	66
Export Histograms	70

Chapter 3

Managing Results in Projects

Introduction

An Analyst project is a collection of results from analyses performed on one or more data sets.

Select **Projects** from the **File** menu to create, open, save, and delete Analyst projects.

Managing Projects

Creating a Project

If you do not have any existing projects when you invoke the Analyst application, a new project is automatically created for you. If you already have existing projects, and you want to create a new project, select **File** → **Projects** → **New** to create a new project. A new project tree is displayed.

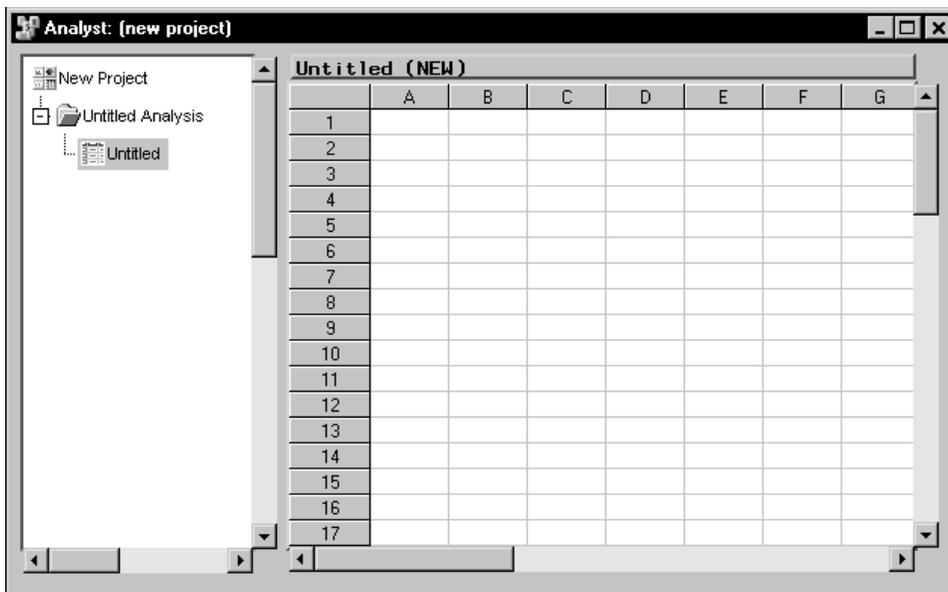


Figure 3.1. New Project

A folder named **Untitled Analysis** that contains a data node named **Untitled** is automatically created in the new project. You can enter data into the data table, open a SAS data file, or open non-SAS data such as Excel files. If you open data into the data table, the folder name is replaced by the name of the data set that you open. If you enter data into the data table, the folder name is replaced when you save the data set.

Saving a Project

To save a project, select **File** → **Projects** → **Save**. A new project must contain a named data table before it can be saved.

When you save a new project, you are prompted to give the project a name.

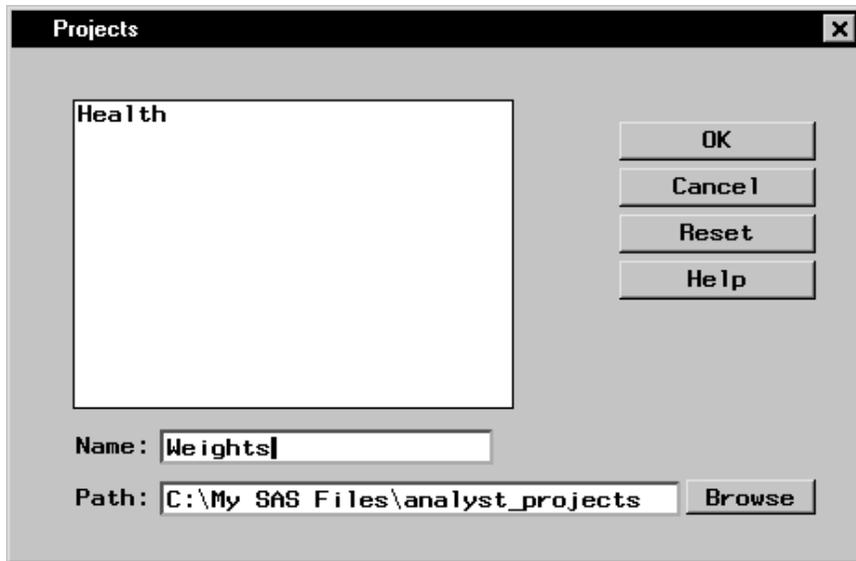


Figure 3.2. Projects Dialog

Type the name of the new project in the **Name:** field. Click on the **Browse** button to search for a directory in which to save the project. Click **OK** to save the project. By default, Analyst projects are saved in the `analyst_projects` directory within the `Sasuser` directory.

Saving a Project Under Another Name

To save the contents of a project under another name, select **File** → **Projects** → **Save As...** and type the new name of the project in the **Name:** field. Click on the **Browse** button to search for a directory in which to save the project. Click **OK** to save the project with the new name. The original project, with its original name, still exists.

Renaming a Folder

To rename a folder within a project, select the folder with the right mouse button, and select **Rename...** from the pop-up menu.

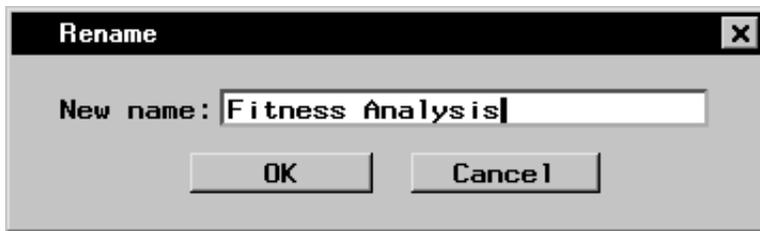


Figure 3.3. Rename Dialog

Type the new name of the folder in the **New name:** field and click **OK**.

Deleting Nodes from a Project

You can delete individual nodes in a project without deleting the project itself. To delete a node, select the node and select **Delete** from the pop-up menu.

Deleting a SAS data set node from the project tree does not delete it from the directory in which it resides. For example, if you open the **Fitness** data set and perform analyses on it, it is not deleted from the **Sasuser** library when you delete it from the project tree.

Deleting an output data set that you have generated from the SAS data set does delete it from the **analyst_projects** folder where it resides. For example, if you create a data table by combining selected columns from two SAS data sets, the data table that you created is deleted when you remove it from the project tree.

Deleting a Project

To delete the current project tree and the files that are stored in a project, select the project and select **Delete...** from the pop-up menu. You can also delete any project by selecting **File** → **Projects** → **Delete...**

Opening Existing Projects

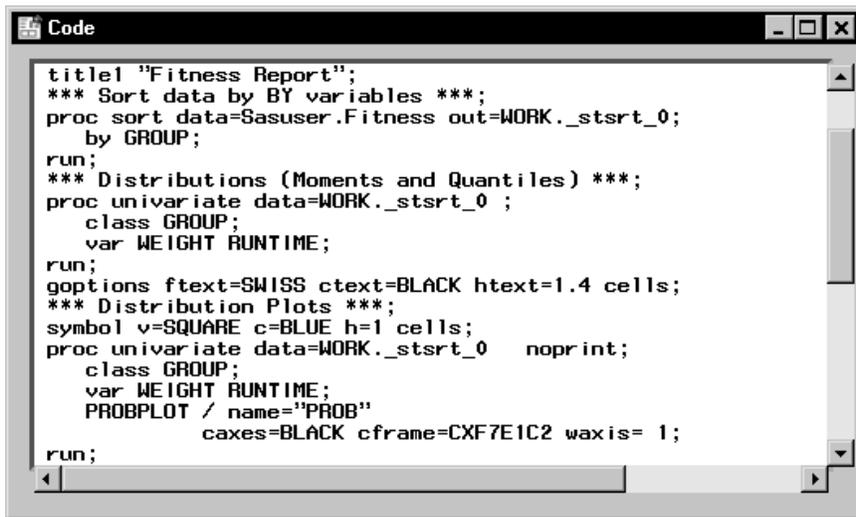
To see all of the projects that you have created, select **File** → **Projects** → **Open ...**. Select a project from the list and click **OK** to open it.

Using Code

When you perform an analysis or create a graph in Analyst, the code that generated your results is saved in a **Code** node in the project tree. You can view, modify, and submit this code.

Viewing Code in the Code Window

To view the code that generated your results, double-click on a **Code** node in your project tree. The code is displayed in the Code window.

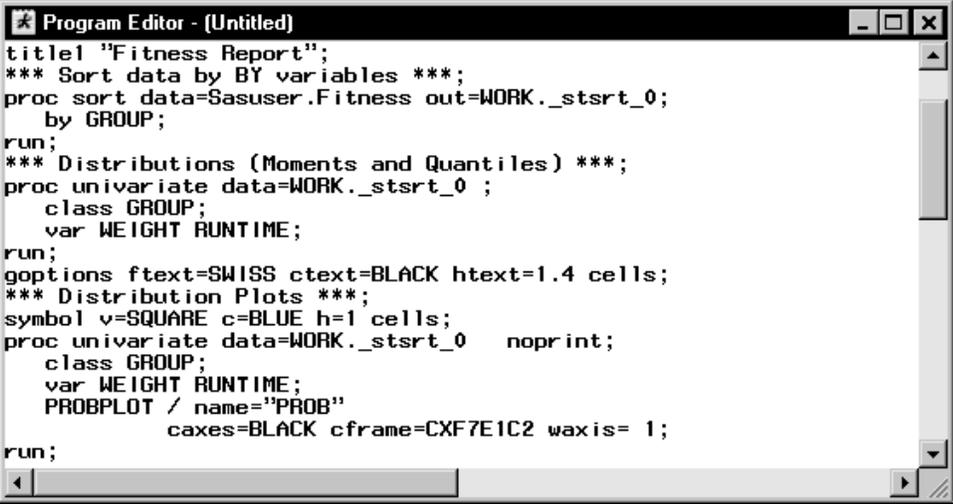
A screenshot of a SAS Code window. The window title is "Code". The code displayed is as follows:

```
title1 "Fitness Report";
*** Sort data by BY variables ***;
proc sort data=Sasuser.Fitness out=WORK._stsr0;
  by GROUP;
run;
*** Distributions (Moments and Quantiles) ***;
proc univariate data=WORK._stsr0;
  class GROUP;
  var WEIGHT RUNTIME;
run;
goptions ftext=SWISS ctext=BLACK htext=1.4 cells;
*** Distribution Plots ***;
symbol v=SQUARE c=BLUE h=1 cells;
proc univariate data=WORK._stsr0 noprint;
  class GROUP;
  var WEIGHT RUNTIME;
  PROBLOT / name="PROB"
           caxes=BLACK cframe=CXF7E1C2 waxis= 1;
run;
```

Figure 3.4. Code Window

Copying Code to the Program Editor Window

To copy code to the Program Editor window, select **Edit** → **Copy to Program Editor** from the Code window.



```
Program Editor - (Untitled)
title1 "Fitness Report";
*** Sort data by BY variables ***;
proc sort data=Sasuser.Fitness out=WORK._stsr0_0;
  by GROUP;
run;
*** Distributions (Moments and Quantiles) ***;
proc univariate data=WORK._stsr0_0 ;
  class GROUP;
  var WEIGHT RUNTIME;
run;
goptions ftext=SWISS ctext=BLACK htext=1.4 cells;
*** Distribution Plots ***;
symbol v=SQUARE c=BLUE h=1 cells;
proc univariate data=WORK._stsr0_0  noprint;
  class GROUP;
  var WEIGHT RUNTIME;
  PROBPLOT / name="PROB"
           caxes=BLACK cframe=CXF7E1C2 waxis= 1;
run;
```

Figure 3.5. Code in Program Editor Window

In the Program Editor window, you can edit, submit, and save code. Your data must be in browse mode in order for you to submit code that uses the current data table. In edit mode, the data table is locked by Analyst.

Printing and Saving Results

You can print and save individual nodes in the project tree.

Saving Text Results

To save code or an analysis result as a file, double-click on a node to open it, and select **File** → **Save As . . .**

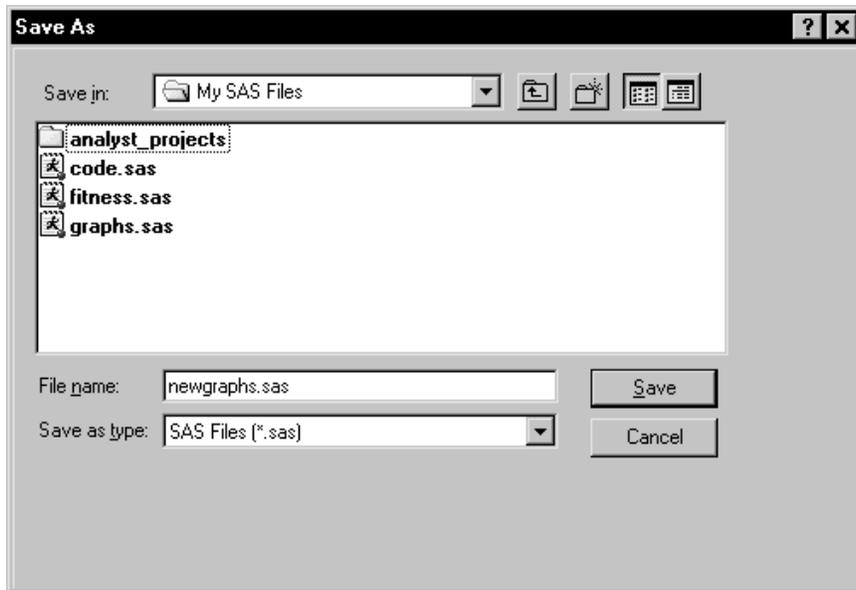


Figure 3.6. Saving a Text File

Type a filename in the **File name:** field, and select a file type. You can also save code or analysis results by selecting a node and selecting **Save as . . .** from the pop-up menu.

Saving a Graph Result as a File

To save a graph result as a file, double-click on a graph node to open it, and select **File** → **Save As . . .**



Figure 3.7. Saving a Graphics File

Type a filename in the **File name:** field, and select a file type. You can save the graph in formats that include GIF and postscript.

You can also save a graph result by selecting a node and selecting **Save as . . .** from the pop-up menu.

Saving a Result as a Catalog Entry

To save a result as an entry in a SAS catalog, double-click on the node to open it, and select **File** → **Save as Object . . .**

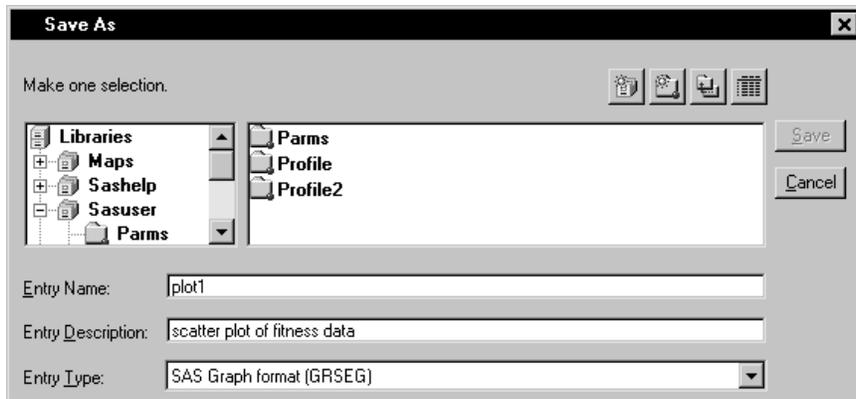


Figure 3.8. Saving a Catalog Entry

Select a library from the list of **Libraries**, and select a catalog. Select an entry name or enter one in the field labeled **Entry Name:**. You can also enter a description for the catalog entry.

Printing Results

You can print code, analysis results, and graph results. Print graph results by opening the graph and selecting **File** → **Print** . . .

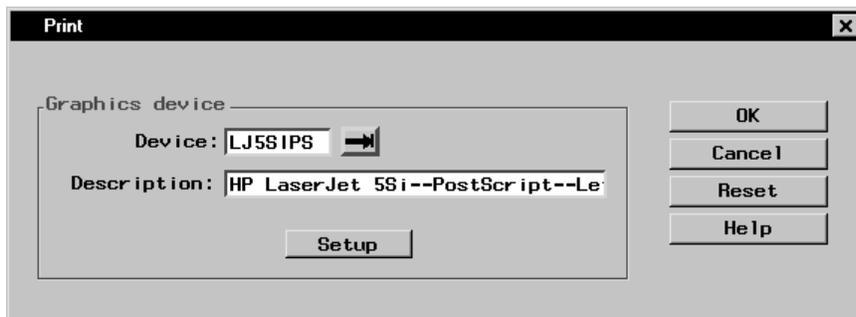


Figure 3.9. Graph Print Dialog

Click on the arrow next to the **Device:** field to select a device driver for your printer, camera, or plotter. The description of the device is displayed in the **Description:** field.

Click on the **Setup** button to display the Print Setup dialog, where you can select a printer and determine the page setup for printing.

To print a code or analysis result, open the node and select **File** → **Print** . . .

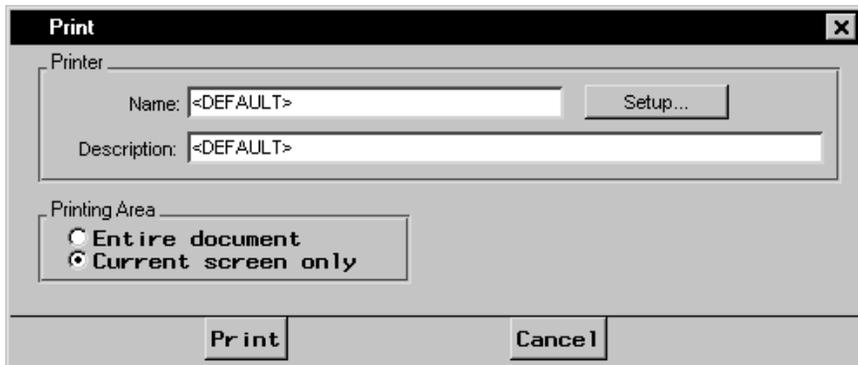


Figure 3.10. Text File Print Dialog

Type the name of the printer in the **Name:** field, or click on the **Setup** button to choose a printer. Select **Entire document** or **Current screen only** as the area to be printed. Click on the **Print** button to print your result.

Example: Create and Export Histograms

In this example, you open the project that contains the simple regression that you performed in the example at the end of Chapter 1, “Overview,” and save the project under another name. Then you add to the new project by generating histograms from the **Fitness** data.

Open the Project

To open the project that you created in Chapter 1, follow these steps:

1. Select **File** → **Projects** → **Open . . .**
2. Select **My Project**. Click **OK**.

Save the Project Under Another Name

To give the project a more appropriate name, follow these steps:

1. Select **My Project** at the top of the project tree, and select **Save as . . .** from the pop-up menu.

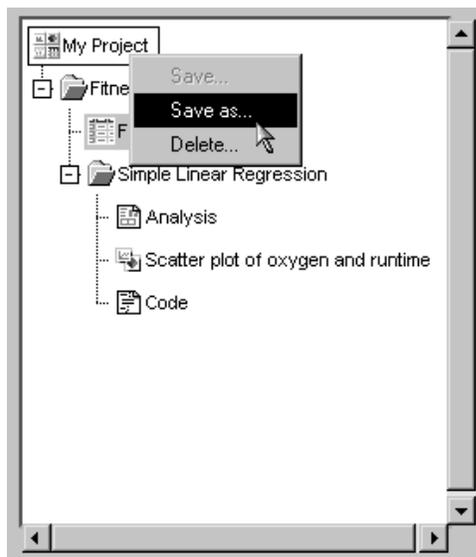


Figure 3.11. Saving a Project Under Another Name

2. Type Fitness in the **Name:** field and click **OK**.

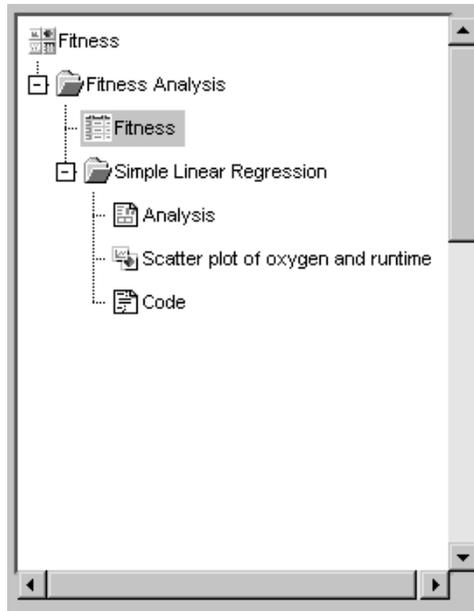


Figure 3.12. Fitness Project

A copy of the project tree is saved with the name **Fitness**. The original project is saved until you delete it.

Generate Histograms

Histograms display the distribution of a particular variable over various intervals, or classes. You can use histograms to see the shape of the distribution and to determine whether the data are distributed symmetrically. A comparative histogram is produced if you specify a classification variable.

To generate comparative histograms of maximum heart rate for each experimental group from the **Fitness** data table, follow these steps:

1. Select **Graphs** → **Histogram . . .**
2. Select **maxpulse** from the list, and click on the **Analysis** button. Select **group** from the list, and click on the **Class** button.

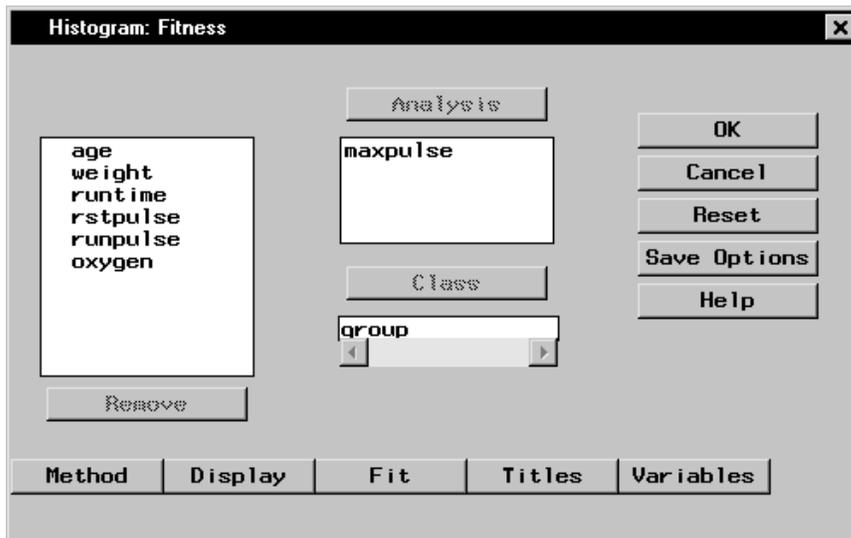


Figure 3.13. Fitness Analysis and Class Variables

3. To change the way the histogram is displayed, click on the **Display** button.

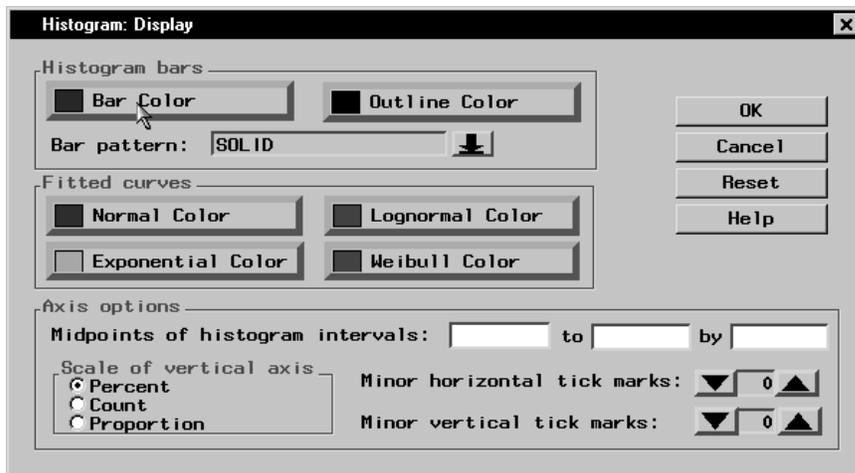


Figure 3.14. Histogram: Display Dialog

4. Click **Bar Color** to change the color of the histogram bars. Select **Red** from the list of colors.

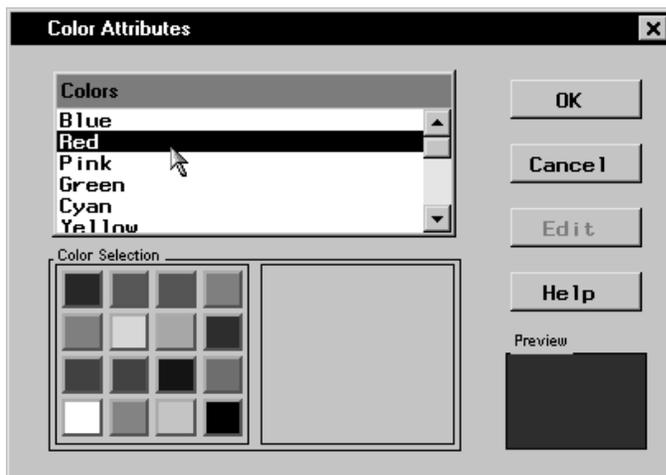


Figure 3.15. Color Attributes Dialog

- Click **OK** to change the bar color to red.
5. To use number of subjects, rather than percentage, as a gauge of bar size, select **Count** under **Scale of vertical axis**. Click **OK** to return to the Histogram dialog.

- Click **OK** to create histograms of the maximum heart rate for each group.

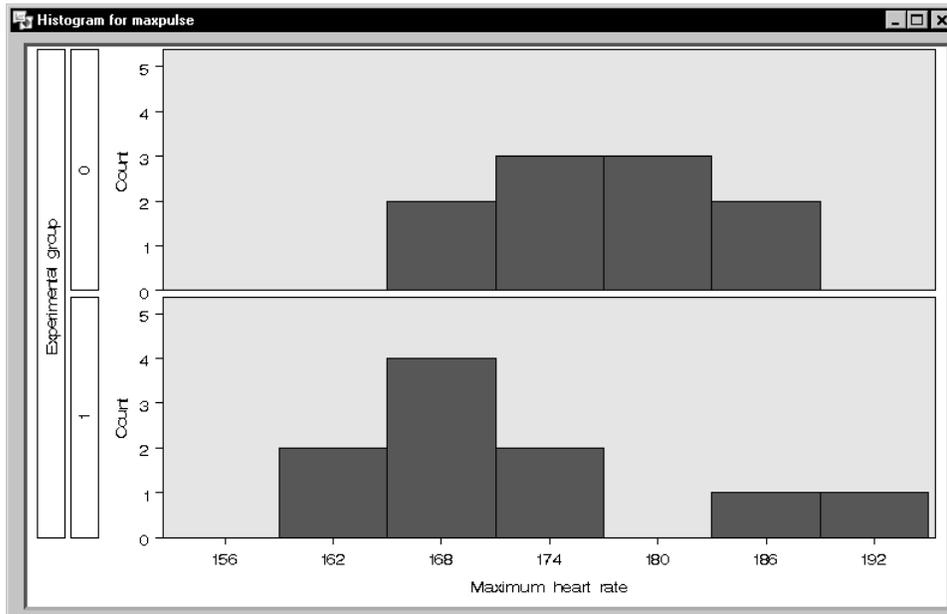


Figure 3.16. Maximum Heart Rate Histograms

The histograms and the code that produced them have been added to the project tree.

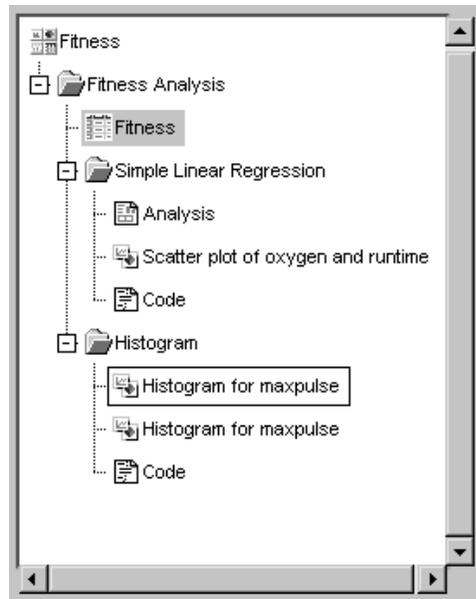


Figure 3.17. Project Tree with Histogram Folder

Export Histograms

To save the histogram that you have generated as a graphics file, follow these steps:

1. Double-click on the first node that is labeled **Histogram for maxpulse** to open it.
2. Select **File** → **Save As . . .**
3. In the Save As dialog, click on the arrow next to **Save as type:** and select **GIF file**.
4. Type **coronary.gif** in the **File name:** field.

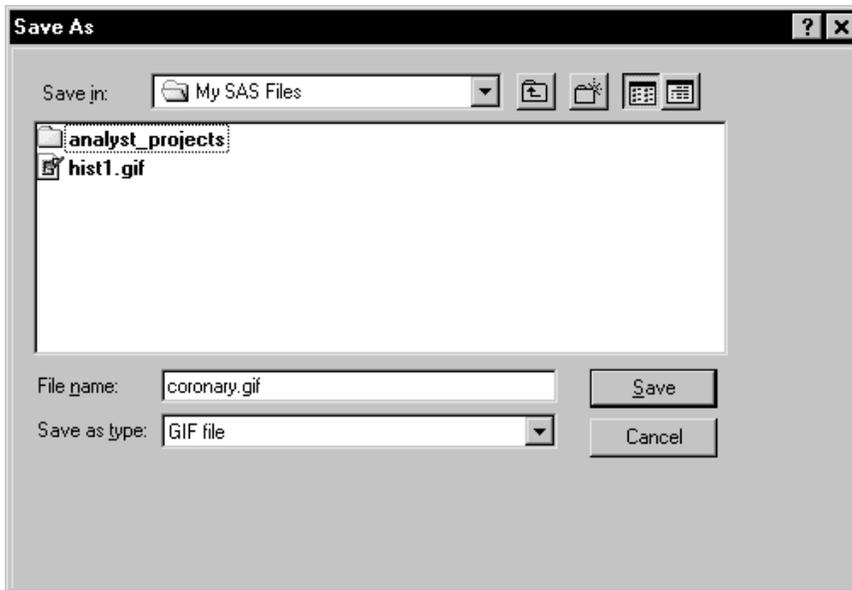


Figure 3.18. Save GIF File

5. Click on the **Save** button to save the file. The histogram is exported to a GIF formatted file.

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