<u>**General Guidelines: SAS Analyst**</u>

The Analyst application is a data analysis tool in SAS for Windows (version 7 and later) that provides easy access to basic statistical analyses using a point-and-click interface. It is intended for students and novice SAS users as well as for researchers and analysts who are already familiar with SAS.

1. Launching Analyst

From the menu at the top of the screen, select **SOLUTIONS** → **ANALYSIS** → **ANALYST**

The following appears:
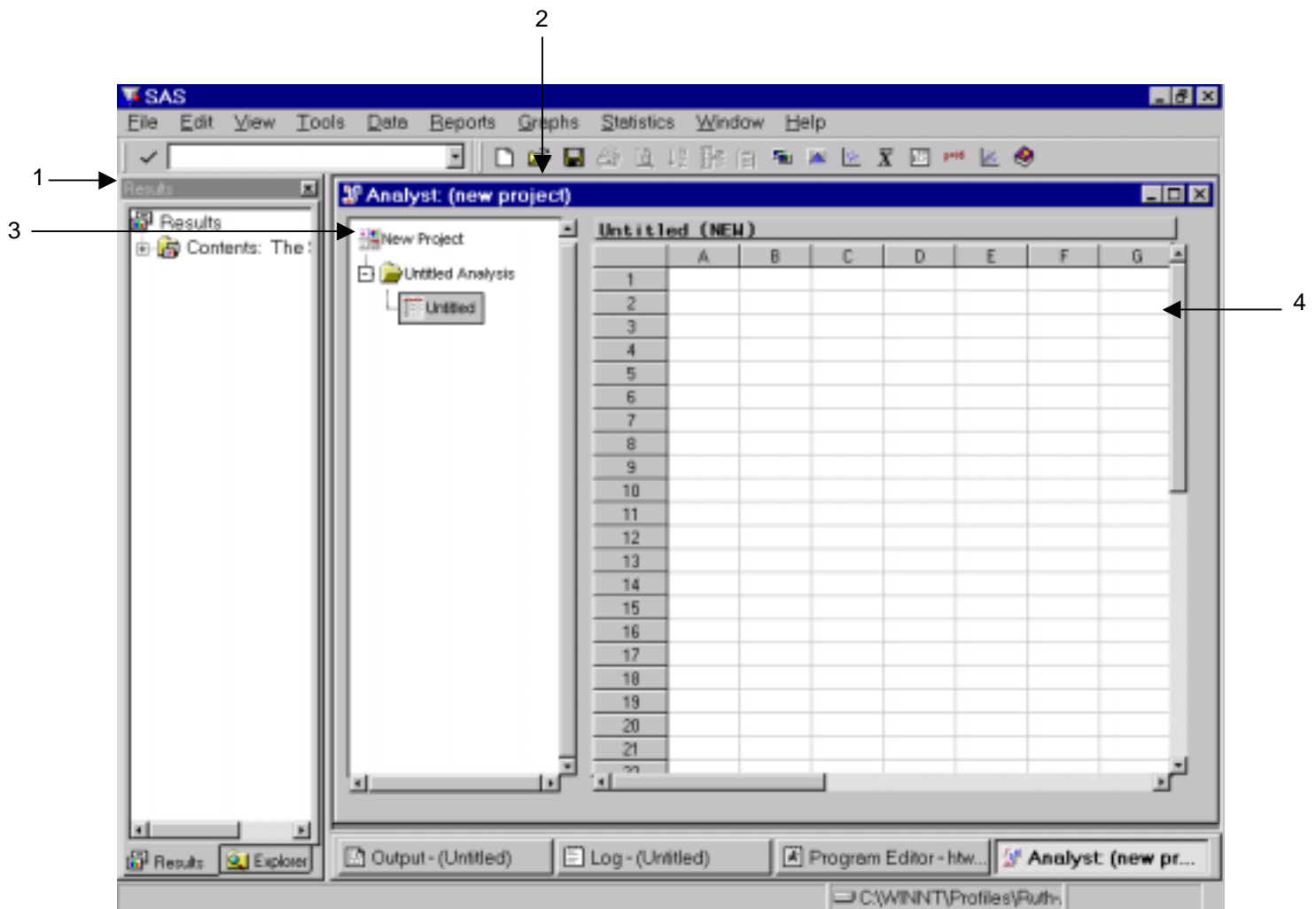
1. **Results Tree Window**- This window helps to manage SAS output.

2. **Explorer Window** - This is used to view and manage files (similar to the Microsoft Windows version of Explorer). SAS libraries, files, and shortcuts can be created within this window.

3. **Analyst Window** - This window allows you to access and manipulate data using Analyst

4. **Analyst Project Window** - Analysts results are organized by project. To access results, click on the name of the analysis; this expands to include any other output data from the analysis. You can also view the SAS code that generated the output.

5. **Data Table** - displays data from the data set; data sets can either be read or created in this window.

To maximize the Analyst Window - close the Results and Explorer windows by clicking on the **X** at the top right hand corner of both windows.

2. Pull-Down Menus

- **File** - open and save files
- **Edit** - work with data in data table
- **View** - work with columns in data table; change mode to EDIT so can manipulate data
- **Tools** - make global changes
- **Data** - work with data to create new variables and prepare them for various calculations
- **Reports** - list data and tables in various ways (without changing the original data)
- **Graphs** - generate charts and plots
- **Statistics** - generate various statistics - you'll become very familiar with this menu
- **Window** - move between the various active windows in SAS
- **Help** - guess!

3. Working with Data

➢ Creating a Data Table

You can enter data in the untitled data table that appears when you invoke the Analyst application. Enter your variable names as the column titles and your data in the appropriate cells beneath the variable names.

To name the columns, click on the name of the column and type in the new name.

➢ Opening a Data Table

SAS data set - to access a pre-existing SAS data set and bring the data into a data table in Analyst, from the menu at the top of the screen, click on **FILE → OPEN.** Then go to the correct directory and open the data file.

Non-SAS data set - click on **FILE → OPEN**. Select the appropriate file type from the list, go to the correct directory and open the data file.

To change the column names first switch into edit mode (from the menu at the top of the screen, click on **EDIT → MODE → EDIT**. In the data sheet, right-click on the column name and select
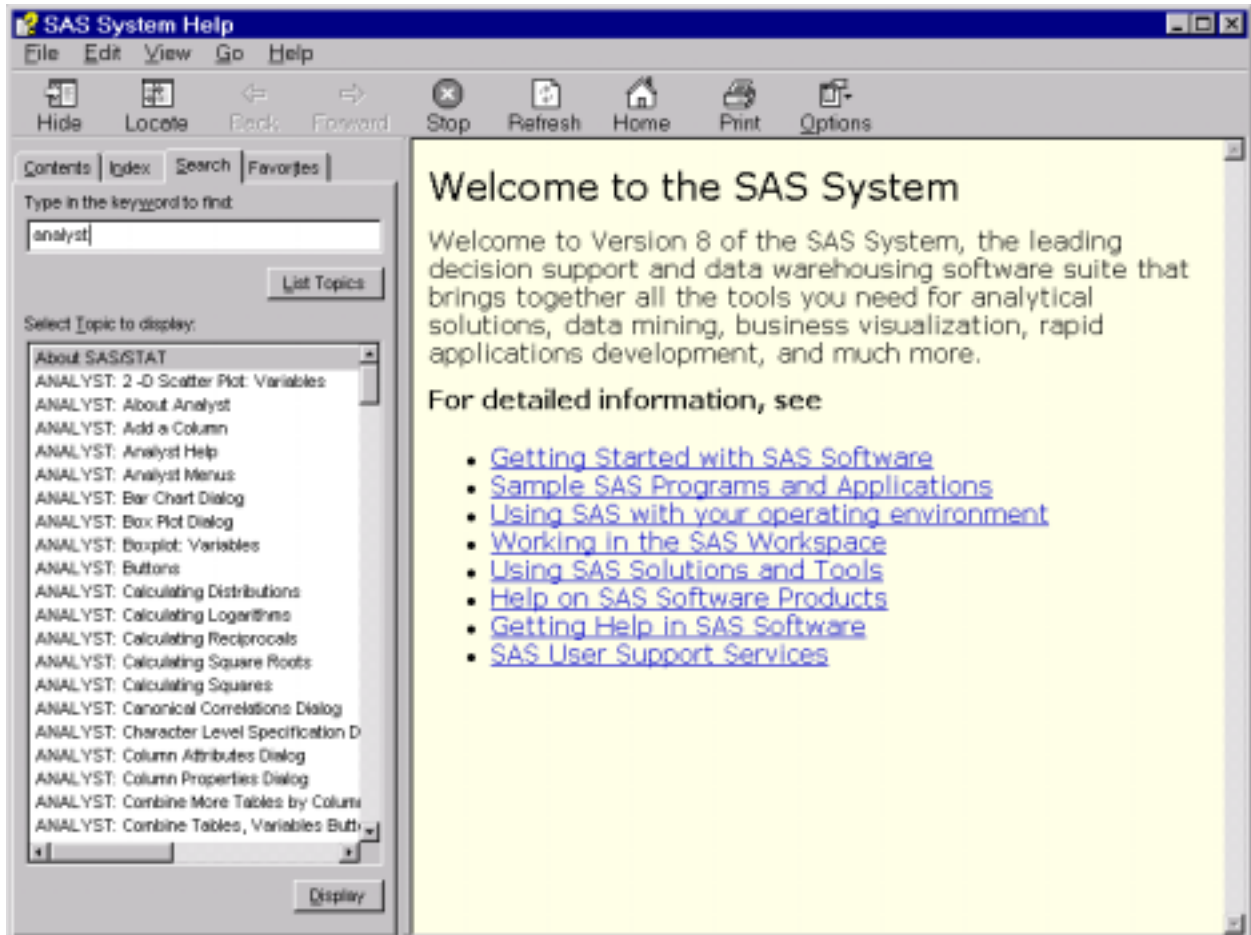
PROPERTIES. In the window that pops up, replace the old column name with the new name. You can also add a more descriptive label if desired.

4. Analyst Help

➢ **To access the SAS Analyst Help:**

A)
- Click on **HELP → SAS SYSTEM HELP**
- Select the **SEARCH** tab and type in '*analyst'* as the keyword
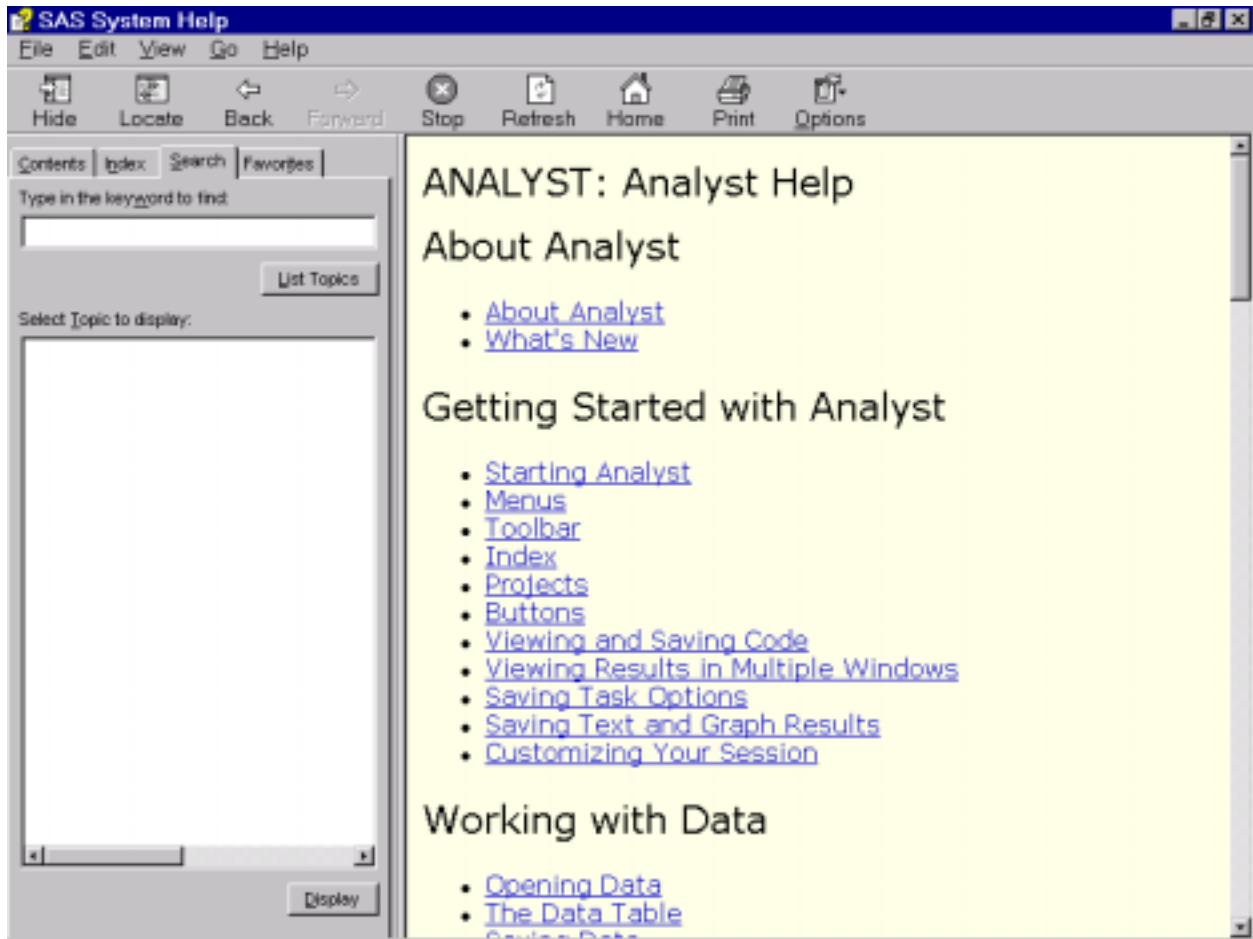- Click on **LIST TOPICS**

- Scroll down the list of Analyst topics in the left-hand window or choose one of the options in the larger window on the right.

B) Click on the **Analyst Help icon** at the top right-hand side of the screen. The following window should pop-up:

- Scroll down the right side of the window to view other topics.

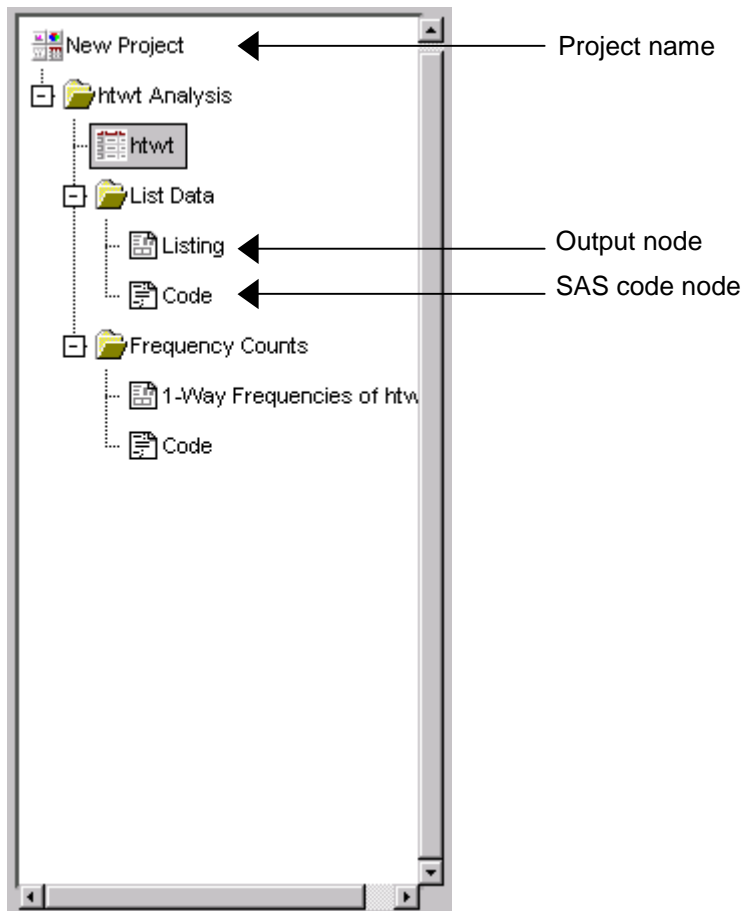➢ **To access help for a currently active window**

- While remaining in a dialogue window, click on **HELP → USING THIS WINDOW**

➢ **On-line help**

- http://www.sas.com/rnd/app/da/analyst.html

- http://www.warwick.ac.uk/services/csv/docs/unix/analyst.pdf (pdf file)

- http://www.pop.psu.edu/help/cacpri/base/base.html (base SAS help - from Penn State)

5. **Project Management**

➢ **Analysis folders -** a folder is created in the project tree for each procedure carried out. Each folder contains the output and the SAS code (saved as separate *nodes*) used to generate that output. You can view these at any time in the session by double-clicking on the desired node.

New Project ← Project name

⊟ htwt Analysis

   htwt

   ⊟ List Data

      Listing ← Output node

      Code ← SAS code node

   ⊟ Frequency Counts

      1-Way Frequencies of htw

      Code

➢ **Naming folders** - Analysis folders are named according to the procedures executed. They can be renamed by the user as required:

- Right-click on the folder and select **RENAME**.

- Type in the new name and click **OK**.

➢ **Deleting folders** - Analysis folders can be deleted in parts or in their entirety. To delete:

- The whole folder (code and output) - Right-click on the analysis folder and select **DELETE**. Click **DELETE** in the confirmation dialogue box that pops up.

- Parts of the folder (either the code or the output) - Right-click on the part you wish to remove and click **DELETE**. Click **DELETE** in the confirmation dialogue box that pops up.

➢ **Saving Projects** - (including all analysis folders) to save projects for future sessions:

- Right-click on the Project name *(see above figure)* and select **SAVE**. In the dialogue window that pops up, type in the new PROJECT NAME and browse to find the appropriate directory in which to save it. Click **OK** when finished.

➢ **SAS Code** - Even though the analyses can be carried out in using a point-and-click method, having at least a basic knowledge of SAS code is still helpful (if not necessary):

- The code can reveal much about the output (e.g. if you don't understand why an output looks the way it does, the code will show you the commands used)

- When the definitions and explanations for various procedures or options in the dialogue windows aren't clear in Analyst, an understanding of SAS commands can help you make the appropriate decisions (e.g. carrying out the correct procedures, formatting the output properly, etc…)

- The ability to move between Analyst and base SAS allows you to copy the code from Analyst into the Program Editor of base SAS and edit it as desired. This is especially helpful given Analyst's limitations. You can quickly carry out basic data analyses (including multiple and logistic regressions) and then if necessary, copy the code into the Program Editor and use SAS code to carry out more advanced analyses.