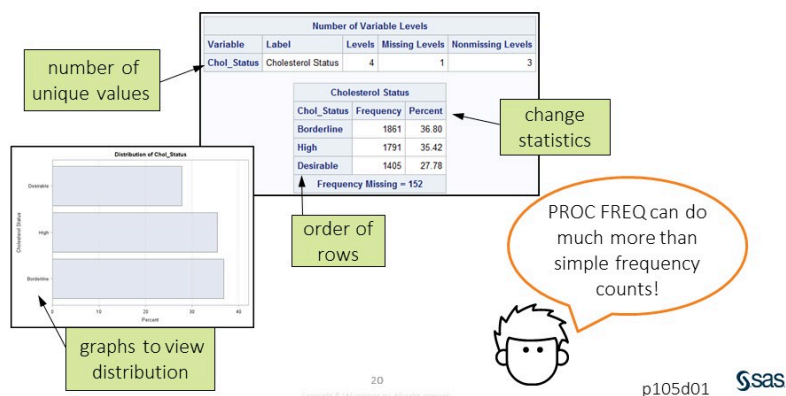


# B5.2 - Creating Frequency Reports

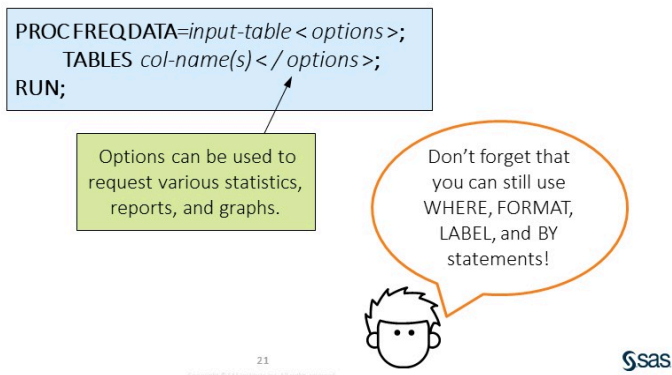
## One-Way Frequency Reports

### Creating One-Way Frequency Reports and Graphs



We used the FREQ procedure for data validation, but there are many more statements and options available in PROC FREQ that we can use to customize the output and include additional statistics.

### Creating One-Way Frequency Reports and Graphs



A basic frequency report is based on individual columns. By default, each column listed in the TABLES statement generates a separate frequency table that includes the number and percentage of rows for each value in the data, as well as a cumulative frequency and percent. The numbers included in this report can be customized using options in the PROC FREQ and TABLES statements.

## Demo: Creating Frequency Reports and Graphs

## [5\\_2 - Demo - Creating Frequency Reports and Graphs.pdf](#)

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## Activity 5.05

Open **p105a05.sas** from the **activities** folder and perform the following tasks:

1. Create a temporary output table named **storm\_count** by completing the **OUT=** option in the **TABLES** statement.
2. Add the **NOPRINT** option in the **PROC FREQ** statement to suppress the printed report.
3. Run the program. Which statistics are included in the output table?
4. Put **StartDate** and **BasinName** in separate **TABLES** statements. Add the **OUT=** option in each statement, and name the tables **MONTH\_COUNT** and **BASIN\_COUNT**.
5. Run the program and examine the two tables. Which month has the highest number of storms?

[Click here for Solution.](#)

## Two-way Frequency Reports

### Creating Two-Way Frequency Reports

```
PROC FREQ DATA=input-table <options>;
  TABLES col-name*col-name </options>;
RUN;
```

rows

columns

```
proc freq data=sashelp.heart;
  tables BP_Status*Chol_Status;
run;
```

**Blood Pressure by Cholesterol Status**

Frequency Percent Row Pct Col Pct	Table of BP_Status by Chol_Status			
	Chol_Status(Cholesterol Status)			
BP_Status(Blood Pressure Status)	Borderline	Desirable	High	Total
High	798 15.78 36.21 42.88	456 9.02 20.69 32.46	950 18.79 43.10 53.04	2204 43.58
Normal	793 15.68 38.09 42.61	634 12.54 30.45 45.12	655 12.95 31.46 46.57	2082 41.17
Optimal	270 5.34 35.02 14.51	315 6.23 40.86 22.42	196 3.68 24.12 10.39	771 15.25
Total	1861 36.80	1405 27.78	1791 35.42	5057 100.00

Frequency Missing = 152

One little symbol in the TABLES statement can make a huge difference in the results. When you place an asterisk between two columns in the TABLES statement, PROC FREQ produces a two-way frequency or crosstabulation report. This enables us to look at frequency counts and percentages for a combination of values in the two columns.

A two-way frequency report can use some of the same options we've seen with the one-way frequency report, including NLEVELS to create the number of levels table, ORDER= to control the sequence of rows, and OUT= to create an output table. But there are additional options unique to the two-way frequency report that enable you to apply different layouts to the results, or include new statistics or analyses. Let's check out some of these options in a demo.

## Demo: Creating a Two-Way Frequency Reports

### [5\\_2 - Demo - Creating Two-Way Frequency Reports.pdf](#)

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