



# Understanding SAS Program Syntax

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## Scenario

Examine program statements, improve program spacing, and add comments.

## Files

- **p101d02.sas**
- **sashelp.cars** – a sample table provided by SAS that includes basic information about 428 cars

## Syntax

```
/*comment*/  
*comment;
```

## Notes


- All statements end with a semicolon.
- Spacing does not matter in a SAS program.
- Values not enclosed in quotation marks can be lowercase, uppercase, or mixed case.
- Consistent program spacing is a good practice to make programs legible.
- Use the following automatic spacing features:

SAS Studio: Click **Format Code** .

Enterprise Guide: Select **Edit** ⇨ **Format Code** or press Ctrl+I.

- Comments can be added to prevent text in the program from executing.

## Demo

1. Open the **p101d02.sas** program from the **demos** folder. Run the program. Does it run successfully?
2. Use the Format Code feature to improve the program spacing.
  - Enterprise Guide: Select **Edit** ⇨ **Format Code**. You can also right-click in the program and select **Format Code** or press Ctrl+I.
  - SAS Studio: Click **Format Code** . You can also right-click in the program and select **Format Code**.
3. Add the following text as a comment before the DATA statement: *Program created by <your-name>*  
**Note:** Select the comment text and press Ctrl+/ to surround it with */\** and *\*/*.
4. Comment out the first TITLE statement and the WHERE statement in PROC PRINT. Run the code and verify that 428 rows are included in the results.

```
/*Program created by <name>*/  
data mycars;  
    set sashelp.cars;  
    AvgMPG=mean(mpg_city, mpg_highway);  
run;  
  
*title "Cars with Average MPG Over 35";  
  
proc print data=mycars;  
    var make model type avgmpg;
```

```

*where AvgMPG > 35;
run;

title "Average MPG by Car Type";

proc means data=mycars
    mean min max maxdec=1;
    var avgmpg;
    class type;
run;

title;

```

Obs	Make	Model	Type	AvgMPG
1	Acura	MDX	SUV	20.0
2	Acura	RSX Type S 2dr	Sedan	27.5
3	Acura	TSX 4dr	Sedan	25.5
4	Acura	TL 4dr	Sedan	24.0
5	Acura	3.5 RL 4dr	Sedan	21.0
6	Acura	3.5 RL w/Navigation 4dr	Sedan	21.0
7	Acura	NSX coupe 2dr manual S	Sports	20.5
8	Audi	A4 1.8T 4dr	Sedan	26.5

End of Demonstration