

# **Using Expressions to Create New Columns**

### Scenario

Read an existing SAS table, and create temporary and permanent copies.

### **Files**

- p104d02.sas
- storm\_summary a SAS table that contains one row per storm for the 1980 through 2016 storm seasons

## **Syntax**

```
DATA output-table;
SET input-table;
new-column = expression;
RUN;
```

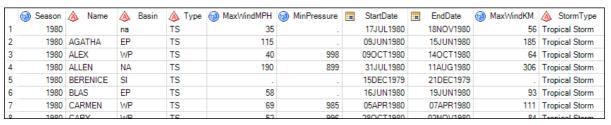
#### **Notes**

- The name of the column to be created or updated is listed on the left side of the equal sign.
- Provide an expression on the right side of the equal sign.
- SAS automatically defines the required attributes (name, type, and length) if the column is new.
- A new numeric column has a length of 8.
- The length of a new character column is determined based on the length of the assigned string.
- Character strings must be enclosed in quotation marks and are case sensitive.

### Demo

- Open p104d02.sas from the demos folder and find the Demo section of the program. Add
  an assignment statement to create a numeric column named MaxWindKM by multiplying MaxWindMPH by
  1.60934.
- 2. Add a FORMAT statement to round **MaxWindKM** to the nearest whole number.
- Add an assignment statement to create a new character column named StormType that is equal to Tropical Storm. Highlight the DATA step and run the selected code.

```
data tropical_storm;
    set pg1.storm_summary;
    drop Hem_EW Hem_NS Lat Lon;
    where Type="TS";
    *Add assignment and FORMAT statements;
    MaxWindKM=MaxWindMPH*1.60934;
    format MaxWindKM 3.;
    StormType="Tropical Storm";
run;
```



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