

SAS(R) 9.2 Language Reference: Dictionary, Fourth Edition

[PDF](#) | [Purchase](#)

What's New in the Base SAS
9.2 Language

Dictionary of Language

Elements

SAS 9.2 Language

Reference: Dictionary

SAS Data Set Options

Formats

Functions and CALL

Routines

Informats

Statements

Definition of

Statements

DATA Step Statements

Global Statements

ABORT Statement

ARRAY Statement

Array Reference

Statement

Assignment Statement

ATTRIB Statement

BY Statement

CALL Statement

CARDS Statement

CARDS4 Statement

CATNAME Statement

CHECKPOINT

EXECUTE_ALWAYS

Statement

Comment Statement

CONTINUE Statement

DATA Statement

DATALINES Statement

DATALINES4

Statement

DECLARE Statement,

Hash and Hash Iterator

Objects

DECLARE Statement,

Java Object

DELETE Statement

DESCRIBE Statement

DISPLAY Statement

DM Statement

DO Statement

DO Statement, Iterative

DO UNTIL Statement

DO WHILE Statement

DROP Statement

END Statement

ENDSAS Statement

ERROR Statement

EXECUTE Statement

FILE Statement

FILENAME Statement

FILENAME Statement,

CATALOG Access

Method

FILENAME,

CLIPBOARD Access

Method

FILENAME Statement,

EMAIL (SMTP) Access

Method

FILENAME Statement,

FTP Access Method

FILENAME Statement,

SFTP Access Method

FILENAME Statement,

SOCKET Access

Method

FILENAME Statement,

URL Access Method

FILENAME Statement,

WebDAV Access

Method

FOOTNOTE Statement

FORMAT Statement

GO TO Statement

IF Statement,

Subsetting

IF-THEN/ELSE

Statement

%INCLUDE Statement

INFILE Statement

IF-THEN/ELSE Statement

Executes a SAS statement for observations that meet specific conditions.

Valid: in a DATA step

Category: Control

Type: Executable

[Syntax](#)

[Arguments](#)

[Details](#)

[Comparisons](#)

[Examples](#)

[See Also](#)

Syntax

```
IF expression THEN statement;  
<ELSE statement; >
```

Arguments

expression

is any SAS expression and is a required argument.

statement

can be any executable SAS statement or DO group.

Details

SAS evaluates the expression in an IF-THEN statement to produce a result that is either non-zero, zero, or missing. A non-zero and nonmissing result causes the expression to be true; a result of zero or missing causes the expression to be false.

If the conditions that are specified in the IF clause are met, the IF-THEN statement executes a SAS statement for observations that are read from a SAS data set, for records in an external file, or for computed values. An optional ELSE statement gives an alternative action if the THEN clause is not executed. The ELSE statement, if used, must immediately follow the IF-THEN statement.

Using IF-THEN statements **without** the ELSE statement causes SAS to evaluate all IF-THEN statements. Using IF-THEN statements **with** the ELSE statement causes SAS to execute IF-THEN statements until it encounters the first true statement. Subsequent IF-THEN statements are not evaluated.

Note: For greater efficiency, construct your IF-THEN/ELSE statement with conditions of decreasing probability. ■

Comparisons

- Use a SELECT group rather than a series of IF-THEN statements when you have a long series of mutually exclusive conditions.
 - Use subsetting IF statements, without a THEN clause, to continue processing only those observations or records that meet the condition that is specified in the IF clause.
-

Examples

These examples show different ways of specifying the IF-THEN/ELSE statement.

- ```
if x then delete;
```
- ```
if status='OK' and type=3 then count+1;
```
- ```
if age ne agecheck then delete;
```
- ```
if x=0 then  
    if y ne 0 then put 'X ZERO, Y NONZERO';  
    else put 'X ZERO, Y ZERO';  
else put 'X NONZERO';
```
- ```
if answer=9 then
do;
 answer=.;
```

