命令模式

IF condition THEN command [ELSE command]

Makes the execution of one or more commands conditional.

条件性的运行单个或多个命令。

Note: This is not a true command, but rather a prefix which may be placed before any of the other commands. It also has a modified multi-line syntax when used within routines; see the ROUTINE command for details.

注意:这并不是真正的命令,但是可以作为前缀放在其它命令的前面。在例程中使用时,它还具有修改的多行语法;有关详细信息,请参阅 ROUTINE 命令

参数说明

condition

An expression of the form (1) a op b, or (2) [NOT] test [name].

条件的表述形式: (1) a op b 或 (2) [NOT] test [name]

The operator op may be any one of the following:

Op 可以下面的一种:

Ор	Meaning	符号所代表的	<u>意义</u>
=	Equals	等于	
<>	Does not equa	al 不等于	
>	Is greater than	大于	
<	Is less than	小于	
>=	ls greater than	or equal to	大于等于
<=	Is less than or e	equal to	小于等于

The test may be any one of the following:

test 可以是下面的一种

Test	Meaning 符号所代表的意义	
EXIST	Macro name exists 宏命令存在	
FEXIST	File name exists 文件存在	
VEXIST	Variable name exists 变量存在	
EOF	End of file or READ DATA mode is not active	
	文件运行完毕或 READ DATA 模式不激活	
EOL	End of line or READ DATA mode is not active	
	行运行完毕或 READ DATA 模式不激活	

Operation

操作

15 January 2023 (10-IF) Rev. I Page: 1/

The expression given by condition is evaluated. If the result is true, then the first command is executed; otherwise the second command, the one after the ELSE is executed. If there is no ELSE clause, then control passes immediately to the next line of input. Command may consist of more than one command if the vertical bar delimiter is used between commands.

首先判断条件的真假,如果为真,会运行第一个命令,否则运行第二个命令,即 ELSE 后的命令。如果没有 ELSE,会直接转到下一行所输入的语句。命令可以包含多个命令,命令之间可以用竖杠隔开。

IF statements may be nested, but only the last IF in a series is permitted to have an ELSE clause.

IF 命令可以嵌套使用,但 ELSE 从句只能用于嵌套的最后一个 IF 语句使用。

There are two kinds of expressions:

有两种表述:

1) Expressions involving comparison. These are of the form a op b, using any of the op symbols listed above. If both a and b are unquoted numbers, their numeric values are compared, else the ASCII values of their characters are compared case-sensitively (but may appear otherwise due to automatic capitalization of unquoted characters). The numeric comparison translates any directional suffix ("a", "f", "p", and "s") prior to comparison (so "2f = -2.0" evaluates to true). As a general rule, string variables which could contain spaces should be enclosed in quotes to prevent incorrect interpretation during command parsing.

涉及比较的表述:形式 a op b,可以利用上面提到的任何 op 符号来实现比较关系。如果 a 和 b 都是常规数字(没有加引号),则进行大小比较,如果是 ASCII 代码,则通过 ASCII 代码比较,此时字母的大小写会受影响(也可以将字母设置成全部大写),对于数字的后缀("a","f","p",和 "s")将先于数字进行比较(如 "2f = -2.0" 为真)。根据常规,字符串必须用引号,之间允许有空格,以免出现命令的误解。

2) Expressions involving a test. These are of the form [NOT] test [name], using any of the test symbols listed above. The word NOT can be included for the opposite test (e.g. testing for non-existence). The name parameter is required except for the EOF test.

涉及检查存在性的表述:形式为[NOT] test [name],可以利用上面提到的任何 test 符号来实现检查是否存在。可以利用 NOT 做相反的检查(例如:检查其不存在)。除 EOF 外,必须附加参数 name。

Output:

输出

none.

无

Examples

15 January 2023 (10-IF) Rev. I Page: 2/

样例

Checking for the presence of a parameter in a macro command:

检查在宏命令中是否存在某参数:

IF "%1" = "" THEN MESSAGE PARAMETER REQUIRED! | EXIT

Checking for the existence of a macro before executing it:

在运行宏命令前,检查它是否存在:

IF EXIST MENU THEN .MENU

Checking for the existence of a file on the current directory:

检查在当前目录下是否存在某文件:

IF FEXIST STAB.RF THEN RUN STAB.RF

Checking for the non-existence of a variable:

检查是否不存在某变量:

IF NOT VEXIST X THEN VARIABLE X=100

Checking whether the end of the data file has been reached:

检查是否已到达某数据文件的尾部:

IF EOF THEN EXIT

Performing numeric comparisons involving direction suffixes:

运行数据比较并考虑方向性后缀:

VARIABLE loc = "-2.0"

IF {loc}=2f THEN NOTE True \text{`True}

Forcing a string comparison using quotes:

强制对引号中的字符串进行比较:

IF "{loc}"=2f THEN NOTE True ELSE NOTE False `False

Performing a case-insenstive string comparison (both capitalized):

对字符串进行比较,识别大小写:

VARIABLE prog = "ghs"

IF {prog}=ghs THEN NOTE True `True

Forcing a case-sensitive string comparison using quotes:

对引号内的字符串进行比较:

IF "{prog}"="ghs" THEN NOTE True ELSE NOTE False `True

IF "{prog}"= ghs THEN NOTE True ELSE NOTE False `False

15 January 2023 (10-IF) Rev. I Page: 3/