

if, unless

`<condition>`

if, unless uses a special syntax. Specify a condition and then an action to be taken if that condition is true (*if*) or untrue (*unless*).

Use **if, unless** to make command execution conditional.

Examples

```
if sd<.15 jump noprint; type 'Standard deviation ', sd; noprint: ...
```

This command jumps to the label called *noprint* if the standard deviation is less than 0.15.

```
unless newval=oldval type 'New value is ', newval
```

This command types out the new value if it is different from the value held in the variable *oldval*.

```
if n=0 if x<pi return
```

This command returns program execution from a library or run file if *n* is equal to zero and *x* is less than π .

```
if n=0 & x<pi return
```

This performs the same function as the above command, using the logical AND operator (&).

Description

Use **if, unless** to direct command execution interactively or program flow. You can use any valid Semper expression as a condition. Refer to *Appendix B, Semper Expression Syntax* for details of the components of a valid expression.

Note that you can specify multiple conditions by repeating **if** or **unless** as in the third command example, or by using the following logical operators as in the last example:

```
~ & |
```

which represent NOT, AND and OR respectively.