



Always enclose phrases you want to use literally within single quotes to avoid misinterpretation.



The newline `\n` and tab `\t` sequences can be included in phrases if preceded by a backslash – for example, `echo \nNEWLINE \tTAB`.

Quoting Phrases

The metacharacters that have special meaning to the Bash shell can be used literally, without applying their special meaning, by enclosing them within a pair of ' ' single-quote characters to form a quoted phrase. For example, to include the name of a shell variable in a phrase without interpreting its value:

- 1 At a prompt, type **echo Processed By: \$SHELL** then hit **Return** to see the shell variable get interpreted in output
- 2 Now, enter **echo 'Processed By: \$SHELL'** to see the shell variable printed literally in output

```
mike@win-pc: ~
mike@win-pc:~$ echo Processed By: $SHELL
Processed By: /bin/bash
mike@win-pc:~$ echo 'Processed By: $SHELL'
Processed By: $SHELL
mike@win-pc:~$
```

Alternatively, the significance of the leading `$` metacharacter of a shell variable can be ignored if preceded by a `\` backslash character to “escape” it from recognition as having special meaning:

- 3 At a prompt, type **echo Processed By: \$SHELL** then hit **Return** to see the shell variable get interpreted in output
- 4 Now, enter **echo Processed By: \\$SHELL** to see the shell variable printed literally in output

```
mike@win-pc: ~
mike@win-pc:~$ echo Processed By: $SHELL
Processed By: /bin/bash
mike@win-pc:~$ echo Processed By: \$SHELL
Processed By: $SHELL
mike@win-pc:~$
```

...cont'd

It is necessary to precede a single-quote character with a \ backslash when it is used as an apostrophe, so it is not interpreted as an incomplete quoted phrase. An incomplete quoted phrase or a \ backslash at the end of a line allows a command to continue on the next line as they escape the newline when you hit Return:

- 5 At a prompt, enter **echo It\'s escaped** to see the apostrophe appear in output
- 6 Next, type **echo Continued ** then hit **Return**, type **text written along ** then hit **Return**, and type **several lines** then hit **Return** to see the continued phrase in output

```
mike@win-pc: ~
mike@win-pc:~$ echo It\'s escaped
It's escaped
mike@win-pc:~$ echo Continued \
> text written along \
> several lines
Continued text written along several lines
mike@win-pc:~$ _
```

Double-quote marks " " are regarded as weak by the Bash shell as they do allow the interpretation of shell variables they enclose. They can, however, be useful to print out a quoted string if the entire string (and its double quotes) are enclosed in single quotes:

- 7 Type **echo "Interpreted With \$SHELL"** then hit **Return** to see the shell variable get interpreted in unquoted output
- 8 Now, enter **echo "'Interpreted With \$SHELL'"** to see the shell variable printed literally in quoted output

```
mike@win-pc: ~
mike@win-pc:~$ echo "Interpreted With $SHELL"
Interpreted With /bin/bash
mike@win-pc:~$ echo "'Interpreted With $SHELL'"
'Interpreted With $SHELL'
mike@win-pc:~$ _
```



Notice that the shell prompt string changes to a > to indicate it is awaiting further input.



You could alternatively escape double-quote characters with a backslash to print them in output – for example, **echo \' "With \\$SHELL" \'**.