

# Shell Variables

Variables are an important part of any program or script. a variable is an element to refer block of data in memory that can be modified. a linux or unix variable can be assigned any type of value, such as text string or number. in linux there are two type of variables.

## System Variable

An environment variable is a variable that is available to any child process of shell. usually, these variables are defined and needed by the programs that it runs, it is created and maintained by the linux itself. this type of variable defined in Capital letters. some of the system variables are shown below.

Variable	Example	Descriptions
BASH_VERSION	echo \$BASH_VERSION	Holds the version of this instance of bash.
HOSTNAME	echo \$HOSTNAME	The name of the your computer.
CDPATH	echo \$CDPATH	The search path for the cd command.
HISTFILE	echo \$HISTFILE	The name of the file in which command history is saved.
HISTFILESIZE	echo \$HISTFILESIZE	The maximum number of lines contained in the history file.
HISTSIZE	echo \$HISTSIZE	The number of commands to remember in the command history. The default value is 500.
HOME	echo \$HOME	The home directory of the current user.
IFS	echo \$IFS	The Internal Field Separator that is used for word splitting after expansion and to split lines into words with the read builtin command. The default value is .
LANG	echo \$LANG	Used to determine the locale category for any category not specifically selected with a variable starting with LC_.
PATH	echo \$PATH	The search path for commands. It is a colon-separated list of directories in which the shell looks for commands.
PS1	echo \$PS1	Your prompt settings.
TMOUT	echo \$TMOUT	The default timeout for the read builtin command. Also in an interactive shell, the value is interpreted as the number of seconds to wait for input after issuing the command. If not input provided it will logout user.
TERM	echo \$TERM	Your login terminal type.
SHELL	cho \$SHELL	Set path to login shell.
DISPLAY	echo \$DISPLAY	Set X display name
PWD	echo \$PWD	current working directory
USERNAME	echo \$USERNAME	Shell name

## User Defined Variable

Shells also allow you to create your own variables for use within scripts (local variables) and to pass between

scripts (global variables). User variables are traditionally created using lower-case characters.

To create a variable merely choose a lower-case name for the variable and give it a value using an equal (=) sign. Make certain that there are no spaces on either side of the equal sign. You can use the unset command to nullify the value of a previous set variable. Here are some examples.

## Syntax

```
variable_name = value
```

```
$a = 10  
echo $a
```

defined string variable in linux the following example

```
$company = 'Veewom Technology'  
echo $company;
```