

# What are Environment variables?

Environment variables in Bash scripting are special variables that store information about the environment in which a program or script is running. These variables are used to pass data into processes, scripts, and system commands, allowing for dynamic behavior based on the environment.

## Key Points About Environment Variables:

- They hold information such as user details, system paths, shell settings, and more.
- Common examples include PATH, HOME, USER, and SHELL.
- Environment variables can be accessed by any program or script running within the same session.
- They can be set, modified, and accessed within scripts to control how they run.

## Common Environment Variables in Bash:

Some standard environment variables are:

**PATH:** Lists directories to search for executable files. When you run a command, the shell searches these directories to find the executable.

**echo \$PATH**

**HOME:** The home directory of the current user.

**echo \$HOME**

**USER:** The username of the current user.

**echo \$USER**

**PWD:** The present working directory.

**echo \$PWD**

Variable	Description	Example Value
<code>PATH</code>	Directories to search for executable files	<code>/usr/local/sbin:/usr/local/bin</code>
<code>HOME</code>	Home directory of the current user	<code>/home/username</code>
<code>USER</code>	Username of the current user	<code>username</code>
<code>PWD</code>	Present working directory	<code>/home/username/docs</code>
<code>OLDPWD</code>	Previous working directory	<code>/home/username</code>
<code>SHELL</code>	Path to the user's default shell	<code>/bin/bash</code>
<code>LANG</code>	Language and region settings	<code>en_US.UTF-8</code>
<code>EDITOR</code>	Default text editor	<code>vim</code> or <code>nano</code>
<code>LOGNAME</code>	Login name of the user	<code>username</code>
<code>UID</code>	Unique user ID number of the current user	<code>1000</code>
<code>HOSTNAME</code>	Name of the host machine	<code>my-computer</code>
<code>PS1</code>	Shell prompt appearance	<code>[\u@\h \w]\\$</code>
<code>MAIL</code>	Location of the user's mail inbox	<code>/var/mail/username</code>
<code>TERM</code>	Type of terminal in use	<code>xterm-256color</code>
<code>RANDOM</code>	Generates a random number each time it's called	<code>18725</code>