The Environment

The Environment

The shell maintains a set of information during a shell session, known as **the environment.** It's just a series of key-value pairs that define properties like:

- Your home directory
- Your working directory
- The name of your shell
- The name of the logged in user

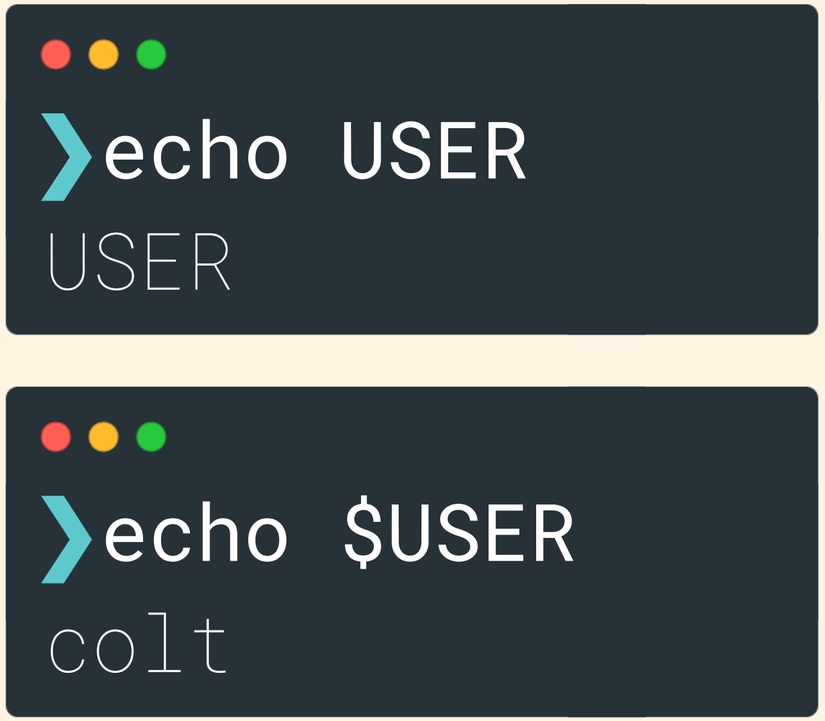
Viewing The Environment

Use the **printenv** command to view the environment variables and their current values. Because there are quite a few values, it can be useful to pipe the output to less.

Parameter Expansion

If we write out the name of an environment variable prefixed with a dollar sign ($), the shell will replace it with the actual value.

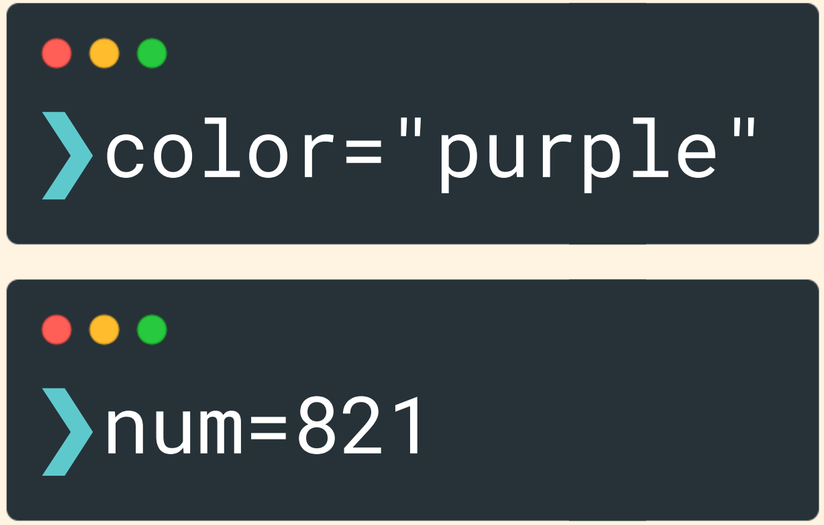
For example, **echo $USER** results in the USER variable's value.



Defining Variables

To define a variable, use the syntax **variable=value**

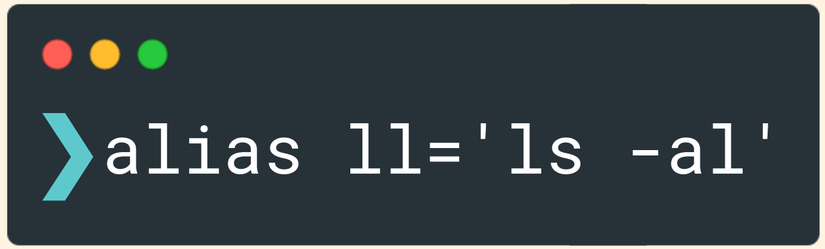
Built-in variables are upper-cased, so it's a common convention to lowercase custom variables to prevent confusion.



Aliases

We can define our own commands using the **alias** keyword.

In the example to the right, we are defining an alias called ll which is equivalent to running ls -al. To execute it, we would simply run ll

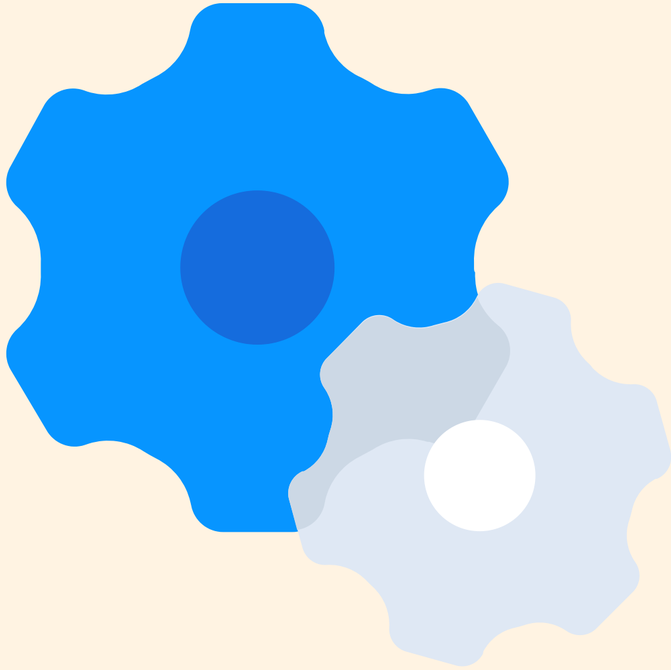


Startup Files

When we log in, the shell reads information from startup files. First, the shell reads from global config files that effect the environment for all users. Then, the shell reads startup files for specific users.

The specific files the shell reads from depends on the type of session: login vs. non-login shell sessions

For login sessions:
- /etc/profile - global config for all users
- ~/.bash_profile - user's personal config file
- ~/.bash_login - read if bash_profile isn't found
- ~/.profile - used if previous two aren't found



Startup Files

For non-login sessions (typical session when you launch the terminal via the GUI):

- etc/bash.bashrc - global config for all users
- **~/.bashrc** - specific settings for each user. This is where we can define our own settings and configuration