

How to Create and Run a Shell Script Recipe in Linux

In the context of Linux, a "recipe" can be interpreted as a set of instructions or a script that automates tasks. Shell scripts are a powerful way to automate repetitive tasks, manage system configurations, and streamline workflows. Understanding how to create and run shell scripts can significantly enhance your productivity and efficiency as a Linux systems engineer. This article will guide you through the process of creating a shell script recipe and running it via the command line.

Examples:

1. Creating a Simple Shell Script Recipe:

Let's start by creating a simple shell script that prints "Hello, World!" to the terminal.

```
#!/bin/bash
# This is a simple shell script recipe
echo "Hello, World!"
```

Save this script in a file named `hello_world.sh`.

2. Making the Script Executable:

Before running the script, you need to make it executable. Use the `chmod` command to change the file permissions.

```
chmod +x hello_world.sh
```

3. Running the Script:

Now, you can run the script using the following command:

```
./hello_world.sh
```

You should see the output:

```
Hello, World!
```

4. Creating a More Complex Script:

Let's create a more complex script that updates the system, installs a package, and cleans up

unnecessary files.

```
#!/bin/bash
# This script updates the system, installs a package, and cleans up

# Update the system
echo "Updating the system..."
sudo apt-get update && sudo apt-get upgrade -y

# Install a package (e.g., curl)
echo "Installing curl..."
sudo apt-get install curl -y

# Clean up
echo "Cleaning up..."
sudo apt-get autoremove -y
sudo apt-get clean

echo "Script completed successfully!"
```

Save this script in a file named `system_maintenance.sh`.

5. Making the Complex Script Executable:

Again, make the script executable:

```
chmod +x system_maintenance.sh
```

6. Running the Complex Script:

Run the script using:

```
./system_maintenance.sh
```

This script will update the system, install the curl package, and clean up unnecessary files.