

Shell Scripting Basics

Press **Esc** to exit full screen

What is a script?

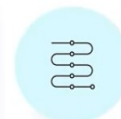
- Script: list of commands interpreted by a scripting language
- Commands can be entered interactively or listed in a text file
- Scripting languages are interpreted at runtime
- Scripting is slower to run, but faster to develop

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What is a script used for?

- Widely used to automate processes
- ETL jobs, file backups and archiving, system admin
- Used for application integration, plug-in development, web apps, and many other tasks



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Shell scripts and the 'shebang'

- Shell script – executable text file with an *interpreter directive*
- Aka 'shebang' directive:

```
#!/interpreter [optional-arg]
```

- '*interpreter*' – path to an executable program
- '*optional-arg*' – single argument string

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Example – 'shebang' directives

Shell script directives:

```
#!/bin/sh
```

```
#!/bin/bash
```

Python script directive:

```
#!/usr/bin/env python3
```

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'Hello World' example shell script

Create the shell script:

```
$ touch hello_world.sh
$ echo '#! /bin/bash' >> hello_world.sh
$ echo 'echo hello world' >> hello_world.sh
```

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'Hello World' example shell script

Make it executable:

```
$ ls -l hello_world.sh
-rw-rw-r-- 1 jgrom jgrom 12 Jun 27 09:13 hello_world.sh
$ chmod +x hello_world.sh
$ ls -l hello_world.sh
-rwxrwxr-x 1 jgrom jgrom 12 Jun 27 09:13 hello_world.sh
```

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Summary

In this video, you learned that:

- A shell script is a program that begins with a 'shebang' directive
- Shell scripts are used to run commands and programs
- Scripting languages are interpreted, not compiled
- Compiled languages are faster, but take more time to develop

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