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SheBang line....

M A Y 1 9 , 2 0 2 5



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Most of you probably know what this is,

but this post is especially for those who've ever wondered — just like I did!

When I first started playing around with scripts, I saw this strange line at the top:

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

```
echo "Hello, World!"
```



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

What is it?

That's called a shebang line, and it plays a powerful role in scripting.

Why is it?

It tells your operating system which interpreter to use to execute your script.

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Examples!!!

- `#!/usr/bin/env python3`.....# For Python 3
- `#!/usr/bin/python`.....# For Python 2
- `#!/bin/bas`.....# For Bash

- `#!/usr/bin/perl.....# For Perl#!/usr/bin/env node # For Node.js`

When is it needed?

File Type???.....Needs SheBang???

Bash/Python script (executed directly).....Yes

Script run via interpreter explicitly (python script.py).....Optional

Compiled code (C/C++).....No

Config or data files (e.g., .json, .xml).....No

Error Conditions!!!

⚠ If you try to run the script *directly* (e.g., `./script.py`, `./myscript.sh`) without a shebang:

- The OS doesn't know **which interpreter** to use.

It defaults to the current shell (usually `/bin/sh`), which might **not support the syntax** used in your script.

```
Syntax error: unexpected word (expecting "do")
```

⚠ If you try to run the script *directly* (e.g., `./script.py`, `./myscript.sh`) with a shebang but unfortunately a wrong interpreter:

```
Syntax error: invalid syntax
```

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Friendly natured. Born and brought up at "scotland of India" (Coorg) Basically a singer. Also interested in pencil sketches.

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