

#Shell Scripting compiler: a program used for converting complete source code into machine code

interpreter: a program that complete source code into machine code line by line
How to create a basic script

Start vim, enable line numbers, and enter insert mode.

Type:

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

```
echo "This is a script that displays information about your Linux system"
```

```
uname -a
```

Save the file and name it "script1.sh"

Type: `chmod u+x script1.sh` to make the file executable.

To run the script type: `./script1.sh`

Variable = place holder for data

\$HOME IS THE CURRENT HOME DIRECTORY \$SHELL is the current working shell \$USER IS THE CURRENT WORKING USER

Table 5-7 File attribute operators in the BASH shell

| File attribute operator | Description |
|-------------------------|--|
| -a | Checks whether the file exists |
| -d | Checks whether the file is a directory |
| -f | Checks whether the file is a regular file |
| -r | Checks whether the user has read permission for the file |
| -s | Checks whether the file contains data |
| -w | Checks whether the user has write permission for the file |
| -x | Checks whether the user has execute permission for the file |
| -O | Checks whether the user is the owner of the file |
| -G | Checks whether the user belongs to the group owner of the file |
| file1 -nt file2 | Checks whether file1 is newer than file2 |
| file1 -ot file2 | Checks whether file1 is older than file2 |