

1. # reference: <http://tldp.org/LDP/abs/html/sha-bang.html>

The `#!` line in a shell script will be the first thing the command interpreter (**sh** or **bash**) sees. Since this line begins with a `#`, it will be correctly interpreted as a comment when the command interpreter finally executes the script. The line has already served its purpose - calling the command interpreter.

If, in fact, the script includes an *extra* `#!` line, then **bash** will interpret it as a comment.

```
#!/bin/bash

echo "Part 1 of script."
a=1

#!/bin/bash
# This does *not* launch a new script.

echo "Part 2 of script."
echo $a # Value of $a stays at 1.
```

2. # reference: <http://tldp.org/LDP/abs/html/sha-bang.html>

```
#!/bin/rm
# Self-deleting script.

# Nothing much seems to happen when you run this... except that the file
# disappears.

WHATEVER=85

echo "This line will never print (betcha!)."

exit $WHATEVER # Doesn't matter. The script will not exit here.
               # Try an echo $? after script termination.
               # You'll get a 0, not a 85.
```

TO DO 1: Also, try starting a README file with a `#!/bin/more`, and making it executable.

3. # reference: <http://tldp.org/LDP/abs/html/sha-bang.html>

A script may begin with a `#!/bin/env bash sha-bang` line. This may be useful on UNIX machines where *bash* is not located in `/bin`

TO DO 1: Try to modify the script to be done in 2nd question as to include `#!/bin/env more`

TO DO 2: Try to modify the script given in 1st question to be run by different shells.

4. It is important to know that, once the script starts running it creates a child bash process. Check the following example:

```
#!/bin/bash

echo "print working directory: `pwd`"
echo "now changing directory to .."

cd ..

echo "print working directory: `pwd`"
echo "once the script ends, check your pwd!"
```

5. You can save a command output to a variable using backquotes around the command: ``command``. The following example saves the output to a variable, and uses it again.

```
#!/bin/bash
echo "Please enter your name!"
echo "WAIT! I have changed my mind!"
echo "I actually now it! Is it `whoami`?"
echo "Let me save it!"
isim=`whoami`
echo "your name is now saved in \${isim}: ${isim}"
```

TO DO 1: In the last line what does `\$` do? What is the difference between `\${isim}` and `${isim}` when used with an echo line?

6. Write a script which lists the contents of the working directory and its parent directory.