

Shell Script Exercise

Below is a shell script. Cut and paste the script into a file and then run it. For full credit, submit an explanation of how it works---explain what each line of code does.

Hint: The bash conditional expression is denoted as [] or *test*. Look up *test* in the on-line man pages. You may also find this [website](#) useful.

```
#!/bin/bash

if [ ! -e $1 ]; then
    echo "file $1 does not exist."
    exit
fi
if [ -d $1 ]; then
    echo -n "$1 is a directory that you may "
    if [ ! -x $1 ]; then
        echo -n "not "
    fi
    echo "search."
elif [ -f $1 ]; then
    echo "$1 is a regular file."
else
    echo "$1 is a special type of file."
fi
if [ -O $1 ]; then
    echo 'you own the file.'
else
    echo 'you do not own the file.'
fi
if [ -r $1 ]; then
    echo 'you have read permission on the file.'
fi
if [ -w $1 ]; then
    echo 'you have write permission on the file.'
fi
if [ -x $1 ]; then
    echo 'you have execute permission on the file.'
fi
```