

Exercise 1:

Write a shell script that displays "This script will exit with a 0 exit status." Be sure that the script does indeed exit with a 0 exit status.

```
#!/bin/bash
# This script displays a message and exits with a 0 status.

echo "This script will exit with a 0 exit status."
exit 0
```

Exercise 2:

Write a shell script that accepts a file or directory name as an argument. Have the script report if it is a regular file, a directory, or other type of file. If it is a regular file, exit with a 0 exit status. If it is a directory, exit with a 1 exit status. If it is some other type of file, exit with a 2 exit status.

```
#!/bin/bash
# This script reports the type of a file or directory and exits with a specific status code.

# Check if an argument was provided
if [ $# -eq 0 ]; then
    echo "Usage: $0 <file_or_directory_name>"
    exit 3
fi

FILE=$1

if [ -f "$FILE" ]; then
    echo "${FILE} is a regular file."
    exit 0
elif [ -d "$FILE" ]; then
    echo "${FILE} is a directory."
    exit 1
else
    echo "${FILE} is another type of file."
    exit 2
fi
```

Exercise 3:

Write a script that executes the command "cat /etc/shadow". If the command returns a 0 exit status report "Command succeeded" and exit with a 0 exit status. If the command returns a nonzero exit status report "Command failed" and exit with a 1 exit status.

```
#!/bin/bash
# This script runs 'cat /etc/shadow' and reports success or failure.

cat /etc/shadow

# Check the exit status of the previous command
if [ $? -eq 0 ]; then
    echo "Command succeeded."
    exit 0
else
    echo "Command failed."
    exit 1
fi
```