Dr. Mark Humphrys

School of Computing. Dublin City University.

Home   **Blog**   **Teaching**   **Research**
Contact

Online coding site: **Ancient Brain**

1,706 coders   5,262 JavaScript worlds

Search:
[Search]

CA170   **CA2106**   **CA686**
CA686I

Online AI coding exercises

Project ideas

Lab - cweb

We will get a script called "cweb" working. This script goes through your web pages, changing one string to another string.
Usage like:

```
cweb oldstring newstring
```

40%

Shell script setup:

1. You need a bin directory.
2. The bin directory must be in the path.
3. This is probably already set up for you.
4. You will have found this out when you did the **Lab on shell**.

5. You need to make a script called "cweb" in the bin directory.
6. It must be executable.

Web pages setup:

1. You need some web pages to edit. You will copy these from me.
2. Make a directory called "shakespeare" in your home directory.
3. Copy my macbeth directory to your shakespeare directory.
   Q. How do you do this?

Demonstrate "sed" working:

1. "cd" into your macbeth directory.
2. Search for all occurrences of the string "Scotland":

   ```
   grep Scotland *html
   ```

3. Change "Scotland" to "Finland" in the output stream:

   ```
   grep Scotland *html | sed -e "s|Scotland|Finland|g"
   ```

4. This changes the output stream on the command line. It does not change the files.

100%

Get this script working.

```
if test "$2" = ""
then
 echo "Error. Not enough arguments."
 exit
fi

# Read in the arguments:

OLDSTRING=$1
(missing line)

cd $HOME/shakespeare/macbeth

for file in *html
do
 cat $file | sed -e "s|$OLDSTRING|$NEWSTRING|g" > tmpfile
  (missing line)
done
```

Q. What are the missing lines?

Testing

1. "cd" into your macbeth directory.
2. Search for all occurrences of the string "Scotland":

   ```
   grep Scotland *html
   ```

3. Change all occurrences of "Scotland" to "Finland":

   ```
   cweb Scotland Finland
   ```

4. Search for all occurrences of "Scotland".
5. Search for all occurrences of "Finland".
6. Change all occurrences of "Finland" to "Scotland".
7. Search for all occurrences of "Scotland".
8. Search for all occurrences of "Finland".

Notes

- Without the check on the number of arguments, you can easily destroy your html files. Without that check, type "cweb" with no arguments, get sed syntax error, crashes, outputs nothing (size zero). All files become size zero.

- You can do a different solution using **sed -i**

This script is very useful

Imagine using this script to change one string to another in 1,000 web pages without having to open any editors (or indeed do any work).

ancientbrain.com   **w2mind.org**   **humphrysfamilytree.com**

On the Internet since **1987**.

Note: Links on this site to user-generated content like Wikipedia are **highlighted in red** as possibly unreliable. My view is that such links are **highly useful but flawed**.