

```

#!/bin/bash
#=====
# SYNOPSIS
#   inverted_index - hashmap like data structure
#
# AUTHOR
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#
# DESCRIPTION
#   hashmap like data structure
#
# EXAMPLE
#   See below
#
# RETURN VALUE
#   Return 0 if successful
#   Return 1 otherwise.
#
# FUTURE ENHANCEMENTS
#   None
#
# BUGS
#   None
#=====
#http://www.phrase1.html
<html>
talk the talk
</html>

#http://www.phrase1_1.html
<html>
in the red
</html>
#=====
#
# online help
#
#=====
help() {
    echo "
Description:
    Process a Linux service

Syntax:
    inverted_index -u <start_url> -l <number_of_levels>

Options:
    -u : start_url

```

recursively search the string from webpage and links mentioned in webpage
-l : number_of_levels
how deep to search into

Examples:

```
$ inverted_index -u http://www.phrase1.html -l 1
talk http://www.phrase1.html
the http://www.phrase1.html

$ inverted_index -u http://www.phrase1.html -l 2
talk http://www.phrase1.html
the http://www.phrase1.html http://www.phrase1_1.html
in http://www.phrase1_1.html
red http://www.phrase1_1.html
```

"

```
exit 0
```

```
}
```

```
#####
```

```
#   main program
```

```
#####
```

```
typeset start_url number_of_levels
```

```
if test $# -eq 0
```

```
then
```

```
    help
```

```
else
```

```
    start_url=
```

```
    number_of_levels=
```

```
    while [ "$#" -ne 0 ]
```

```
    do
```

```
        case "$1" in
```

```
            -u) shift; start_url="$1"; shift;;
```

```
            -l) shift; number_of_levels="$1"; shift;;
```

```
            *) echo "Error in $0: wrong option $1"; help; exit 1;;
```

```
        esac
```

```
    done
```

```
fi
```

```
#####
```

```
#
```

```
# Setup temporary file
```

```
#
```

```
#####
```

```
tmpname=${0##*/}
```

```

# if [ $(echo $tmpname | wc -c) -gt 8 ]
# then
#   typeset -L8 command=$tmpname
# else
#   command=$tmpname
# fi
# Keep the first 10 characters
command=`echo "$tmpname" | sed 's/^\(.....\)*/\1/'`
TEMPA=/tmp/${command}A$$
TEMPB=/tmp/${command}B$$
TEMPC=/tmp/${command}C$$
TEMPD=/tmp/${command}D$$
TEMPE=/tmp/${command}E$$
TEMPF=/tmp/${command}F$$
ALL_TEMP="$TEMPA $TEMPB $TEMPC $TEMPD $TEMPE $TEMPF"

trap "/bin/rm -f $ALL_TEMP; exit 1" \
      1 2 3 4 5 6 7 8 10 12 13 15 16 17 19 20 21
trap "/bin/rm -f $ALL_TEMP" 0

```

```

#####
#
# Processing
#
#####
for (i=0; i < $level; i++)
  lynx -dump $url > $TEMPA
  if [ $? = 0 ]
  then
    echo "$url : `cat $TEMPB`"
  fi

```