
***// This program was copied from terminal, please excuse any odd spacing ***

#!/bin/sh

```
#####  
# Alanna Hupe      Section 1      #  
#                HW7              #  
# Variable Directory:                #  
# file            name of user file  #  
# pattern         pattern to be searched #  
# p              awk variable for user #  
#               pattern              #  
# list[ ]        list to hold line number #  
#               for matches          #  
# len            index iterator for list #  
# patternCount   count for number of  #  
#               matches in file       #  
#####
```

#echo program objective

#prompt user for file and pattern, then echo back

echo "This program will search for pattern within the file provided\n"

echo "Enter file name: \n"

read file

echo "You entered \$file \n"

echo "Enter pattern: "

read pattern

echo "You entered \$pattern \n"

#if the file exists and is a regular file

#begin awk commands

if [-f "\$file"]

then

#print file contents with numbered lines

awk '{ print NR \$0}' \$file

```

#create variable for user pattern called p
awk -v p="$pattern" '

BEGIN { print "Scanning File...\n"}

#if p is within the line, iterate the pattern count
#add line number to list
$0 ~ p {
list[len++]=NR
patternCount++}

#if p is not in line, iterate noMatch
$0 !~ p {noMatch++}

END {
#if no match is equal to number of lines in file
#print no match found
if (noMatch == NR)
print "\nNO MATCH FOUND"
#otherwise, print the pattern count and line numbers
else
print "\npattern occurred : ", patternCount, "times";
for (i = 0; i < len; i++)
print "on lines", list[i] }' $file

#if the file doesn't exist or isn't a regular file
else
echo "NO SUCH FILE EXISTS"
fi

```

```

ahupe01@linux-lab:~/Homework7$ ./findString.sh
This program will search for pattern within the file provided

Enter file name:
bond1.txt
You entered bond1.txt

Enter pattern:
Bond
You entered Bond
Pattern count and line numbers
1      Secret agent Bond had been warned not to tangle with Goldfinger. But the
2 super-criminal's latest obsession was too strong, too dangerous. He had to be
3 stopped.
4      Goldfinger was determined to take possession of half the supply of mined
5 gold in the world--to rob Fort Knox!
6      For this incredible venture he had enlisted the aid of the top criminals
7 in the U.S.A., including a bevy of beautiful thieves from the Bronx. And it
8 would take all if Bond's unique talents to make it fail--as fail it must.
Scanning File...

pattern occurred : 2 times
on lines 1
on lines 8

```

The above represents the script output given that the file exists and there is a pattern to be found in the file

```

ahupe01@linux-lab:~/Homework7$ ./findString.sh
This program will search for pattern within the file provided
file

Enter file name:
puppies.txt file
You entered puppies.txt
FILE EXISTS:
Enter pattern:
puppies
You entered puppies
NO SUCH FILE EXISTS

```

The above represents the script output given that a file doesn't exist

```
ahupe01@linux-lab:~/Homework7$ ./findString.sh
This program will search for pattern within the file provided

Enter file name:
bond1.txt
You entered bond1.txt

Enter pattern:
puppies
You entered puppies

1 "pattern"Count "times"
1      Secret agent Bond had been warned not to tangle with Goldfinger. But the
2 super-criminal's latest obsession was too strong, too dangerous. He had to be
3 stopped.
4      Goldfinger was determined to take possession of half the supply of mined
5 gold in the world--to rob Fort Knox!
6      For this incredible venture he had enlisted the aid of the top criminals
7 in the U.S.A., including a bevy of beautiful thieves from the Bronx. And it
8 would take all if Bond's unique talents to make it fail--as fail it must.
Scanning File...

NO MATCH FOUND
```

The above represents the script output given that the file exists but there is no match to be found in the file

The program took about an hour and half to complete