

newname.sh

```
if [ $# -ne 2 ]
then
    echo "Incorrect number of arguments! Acceptable arguments are input file, and output file."
    exit 1
fi

if [ ! -r $1 ]
then
    echo "$1 is not readable!"
    exit 1
fi

x=1
y=empty
if [ -f $2 ]
then
    while [ -f "$2.$x" ]
    do
        x=$((x+1))
    done
    y="$2.$x"
    mv $1 $y
    exit 0
fi

mv $1 $2
```

booklist.sh

```
clear

if [ $# -ne 1 ]
then
    echo "Invalid number of arguments! Acceptable arguments are input file."
    exit 1
fi

if [ ! -r $1 ]
then
    echo "Input file is not readable!"
    exit 1
fi

if [ ! -w $1 ]
then
    echo "Input file is not writable!"
```

```

    exit 1
fi

echo "Make a choice!"
echo "1) Search the booklist for entries by author"
echo "2) Add a new entry to the booklist"
echo "3) Delete an entry from the booklist (using title as the key)"
echo "4) Display all entries and the number of entries in the booklist"
echo "5) Exit"

read choice

case $choice in
1) echo "Searching booklist by author..."
    clear
    echo "Enter the author to search for:"
    read author
    grep -F "$author" $1 | gawk -F: '{printf "%s\t%s\t%s\n", $1, $2, $3}'
    exit 0
    ;;
2) echo "Adding new entry to booklist..."
    clear
    echo "Make entry as follows: Fname Lname:Title:year"
    read entry
    echo $entry >>$1
    exit 0
    ;;
3) echo "Deleting an entry from the booklist..."
    clear
    echo "Enter the title of the book you wish to delete:"
    read title
    sed -i "/$title/d" $1
    exit 0
    ;;
4) echo "Displaying all entries and the number of entries in the booklist..."
    clear
    sort -k2 $1 | gawk -F: '{printf "%s\t%s\t%s\n", $1, $2, $3}'
    numberOfLines=$(wc -l < $1)
    echo "$numberOfLines total entries returned!"
    exit 0
    ;;
5) echo "Exiting..."
    exit 0
    ;;
*) echo "Invalid choice entered! Exiting..."
    exit 1
    ;;
esac

```

Test results for newname:

- 1) `./newname.sh a.txt b.txt` → renames a.txt to b.txt
- 2) `./newname.sh a.txt b.txt` → renames a.txt to b.txt.2 when b.txt and b.txt.1 exist already.

Test results for booklist.sh:

- 1) Peter Coad → Peter Coad Java Design 2010
- 2) Shane Stacy:book:2019 → appends to end of proj3.txt
- 3) book → deletes the previous entry from proj3.txt

4)

Peter Coad Java Design 2010
Cay Hoarstmann Core Java - Vol 1 2011
Cay Hoarstmann Core Java - Vol 2 2012
Mark Sobell A Practical Guide to Linux 2014

- 5) The program exits.