12. ILLUSTRATION OF CSV FILE PROGRAMMING– II

Develop a menu driven program implementing the user defined functions to perform different functions on a csv file named library.csv(bookid, bookname, noofcopies)

1. Append a record
2. Searching a record based on bookid
3. Display all
4. Exit

Source Code

```
import csv

f = open("library.csv", "a") # Ensure that the file exists
f.close()

def appendBook():
    bID = input("Enter book ID: ")
    bName = input("Enter book Name: ")
    bCopy = input("Enter number of copies: ")

    with open("library.csv", "a", newline="") as f:
        wr = csv.writer(f)
        wr.writerow([bID, bName , bCopy])

    print("Record appended to file")

def searchBook():
    bID = input("Enter book ID: ")

    with open("library.csv", "r", newline="") as f:
        re = csv.reader(f)
        found = False # Using a loop to search for a values
        for row in re:
            if row[0] == bID:
                print("--------------------")
                print("bookID        :", row[0])
                print("Name          :", row[1])
                print("No of Copies  :", row[2])
                print("--------------------")
```

```
                found = True
                break
        if not found:
            print("Book with entered ID was not found")


def showBooks():
    with open("library.csv", "r", newline="") as f:
        re = csv.reader(f)
        for row in re:
            print("--------------------")
            print("bookID        :", row[0])
            print("Name          :", row[1])
            print("No of Copies  :", row[2])
            print("--------------------")

while True:
    print("===========================================")
    print("What would you like to do?")
    print("""
    [1] Append a Book
    [2] Search for a Book
    [3] Show all Books
    [4] Exit
    """)

    ch = input("Enter your choice[1/2/3/4]: ")

    if ch == "1":
        appendBook()

    elif ch == "2":
        searchBook()

    elif ch == "3":
        showBooks()

    elif ch == "4":
        print("[ Exiting ]") # Break from the loop to exit
        break

    else:
        print("[ Invalid Choice ]") # In case user inputs a choice that was n
```

OUTPUT

```
===========================================
What would you like to do?
```

```
    [1] Append a Book
    [2] Search for a Book
    [3] Show all Books
    [4] Exit

Enter your choice[1/2/3/4]: 1
Enter book ID: 1
Enter book Name: Huff
Enter number of copies: 23
Record appended to file
==========================================
What would you like to do?

    [1] Append a Book
    [2] Search for a Book
    [3] Show all Books
    [4] Exit

Enter your choice[1/2/3/4]: 1
Enter book ID: 2
Enter book Name: Puff
Enter number of copies: 45
Record appended to file
==========================================
What would you like to do?

    [1] Append a Book
    [2] Search for a Book
    [3] Show all Books
    [4] Exit

Enter your choice[1/2/3/4]: 2
Enter book ID: 2
--------------------
bookID        : 2
Name          : Puff
No of Copies  : 45
--------------------
==========================================
What would you like to do?

    [1] Append a Book
    [2] Search for a Book
    [3] Show all Books
    [4] Exit

Enter your choice[1/2/3/4]: 3
--------------------
bookID        : 1
Name          : Huff
No of Copies  : 23
--------------------
```

```
--------------------
bookID        : 2
Name          : Puff
No of Copies  : 45
--------------------
============================================
What would you like to do?

    [1] Append a Book
    [2] Search for a Book
    [3] Show all Books
    [4] Exit

Enter your choice[1/2/3/4]: 4
[ Exiting ]
```