

```
254 }
255 function updatePhotoDescription() {
256     if (descriptions.length > (page * 9) + (currentImage.substring(0, 10))) {
257         document.getElementById('bigImageDesc').innerHTML = descriptions[page * 9 + currentImage.substring(0, 10)];
258     }
259 }
260
261 function updateAllImages() {
262     var i = 1;
263     while (i < 10) {
264         var elementId = 'foto' + i;
265         var elementIdBig = 'bigImage' + i;
266         if (page * 9 + i - 1 < photos.length) {
267             document.getElementById(elementId).src = 'images/' + photos[page * 9 + i - 1];
268             document.getElementById(elementIdBig).src = 'images/' + photos[page * 9 + i - 1];
269         } else {
270             document.getElementById(elementId).src = '';
271             document.getElementById(elementIdBig).src = '';
272         }
273         i++;
274     }
275 }
```

PPS MINI PROJECT REPORT

Management of books in a library using C

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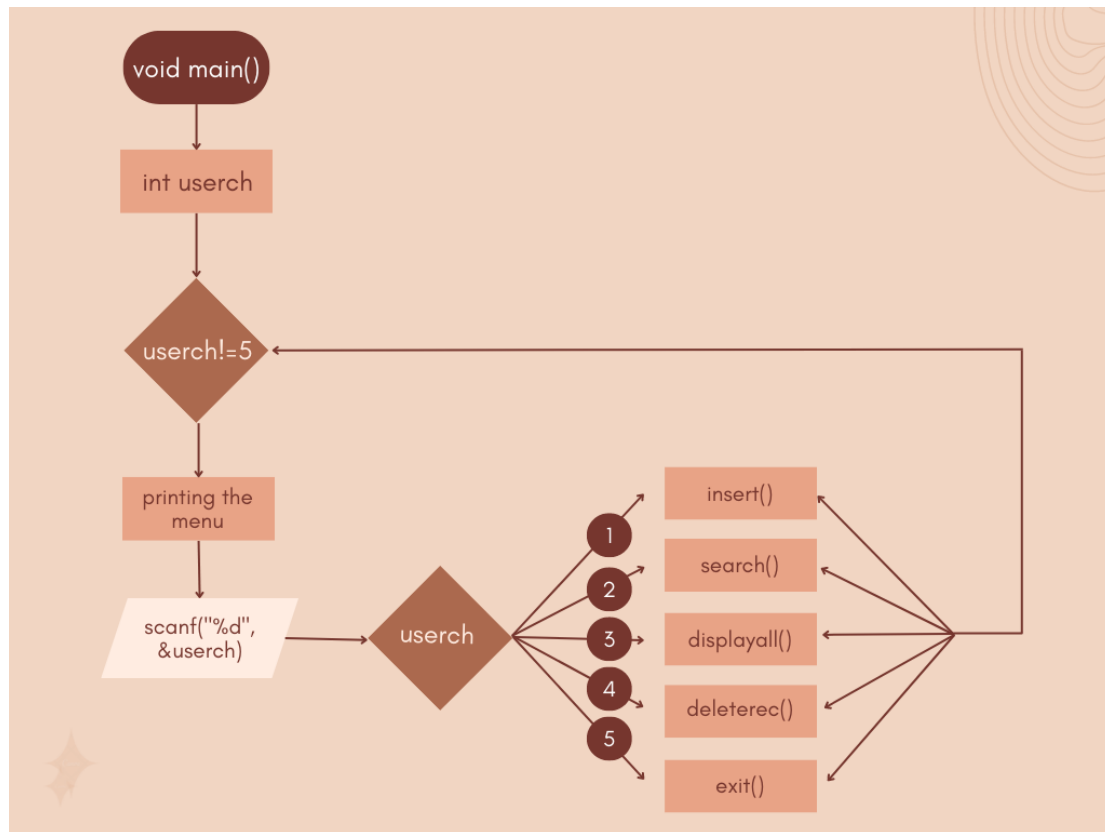
ROLL NUMBER : RA21111030010044

DEPARTMENT : CSE with specialization in Cybersecurity

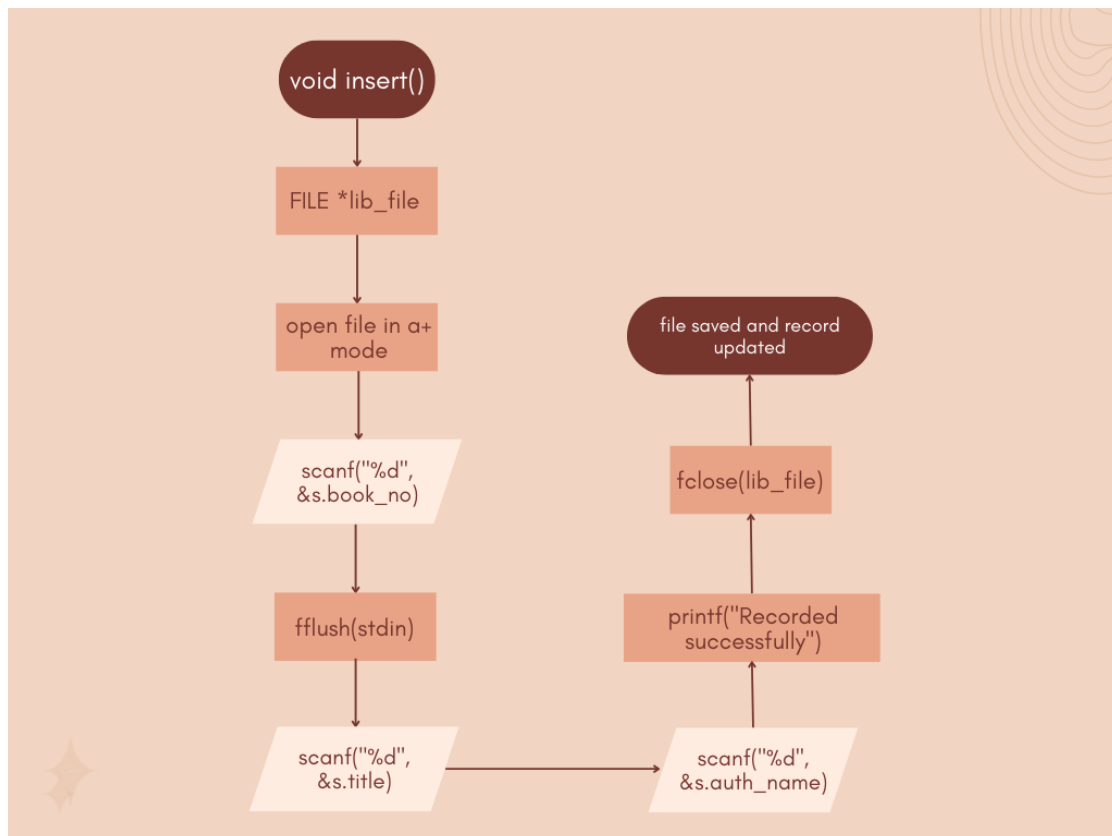
SECTION : M₁

The Methodology Used

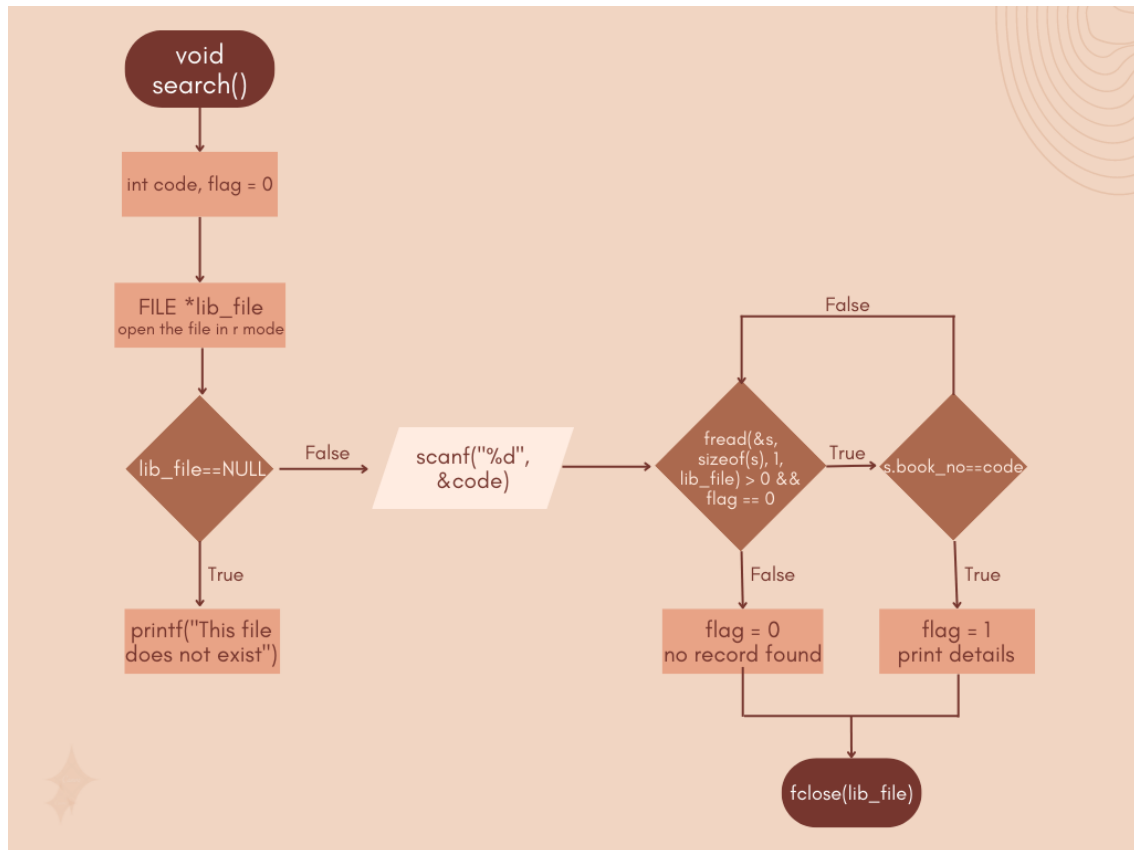
1. Flowchart for void main()



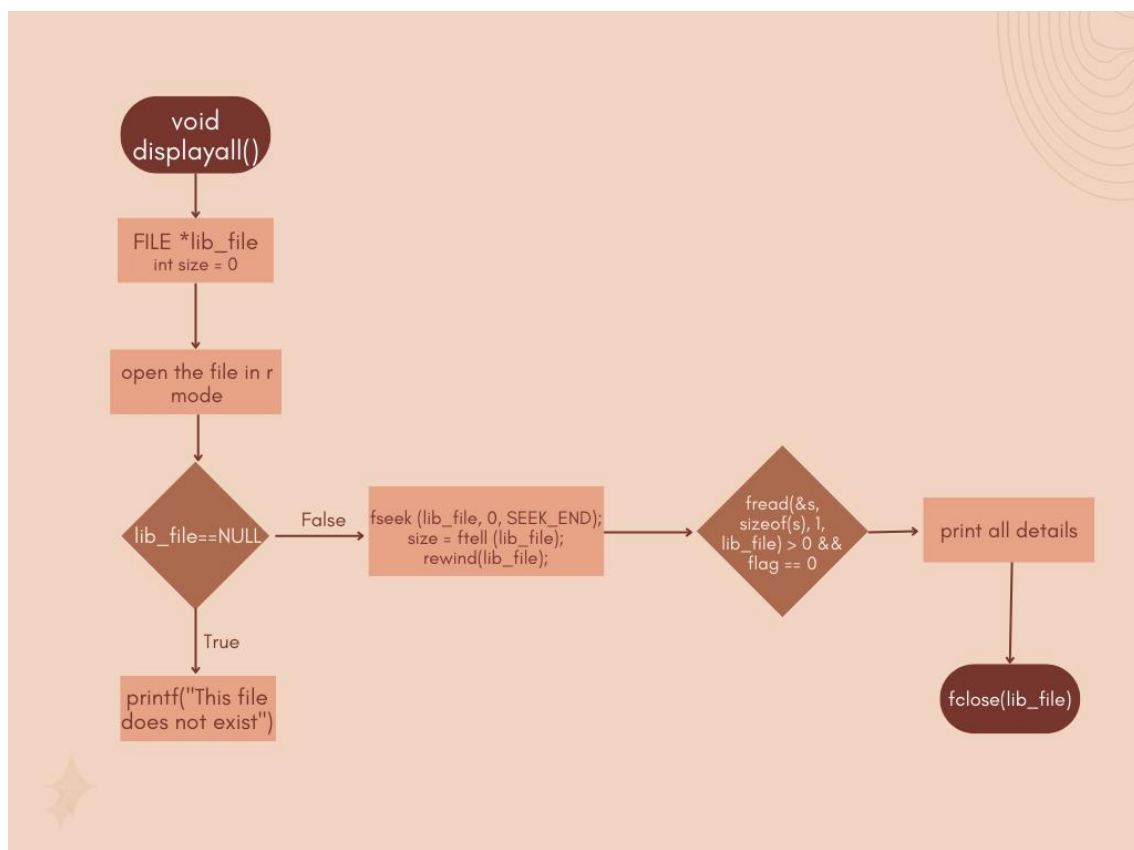
2. Flowchart for void insert()



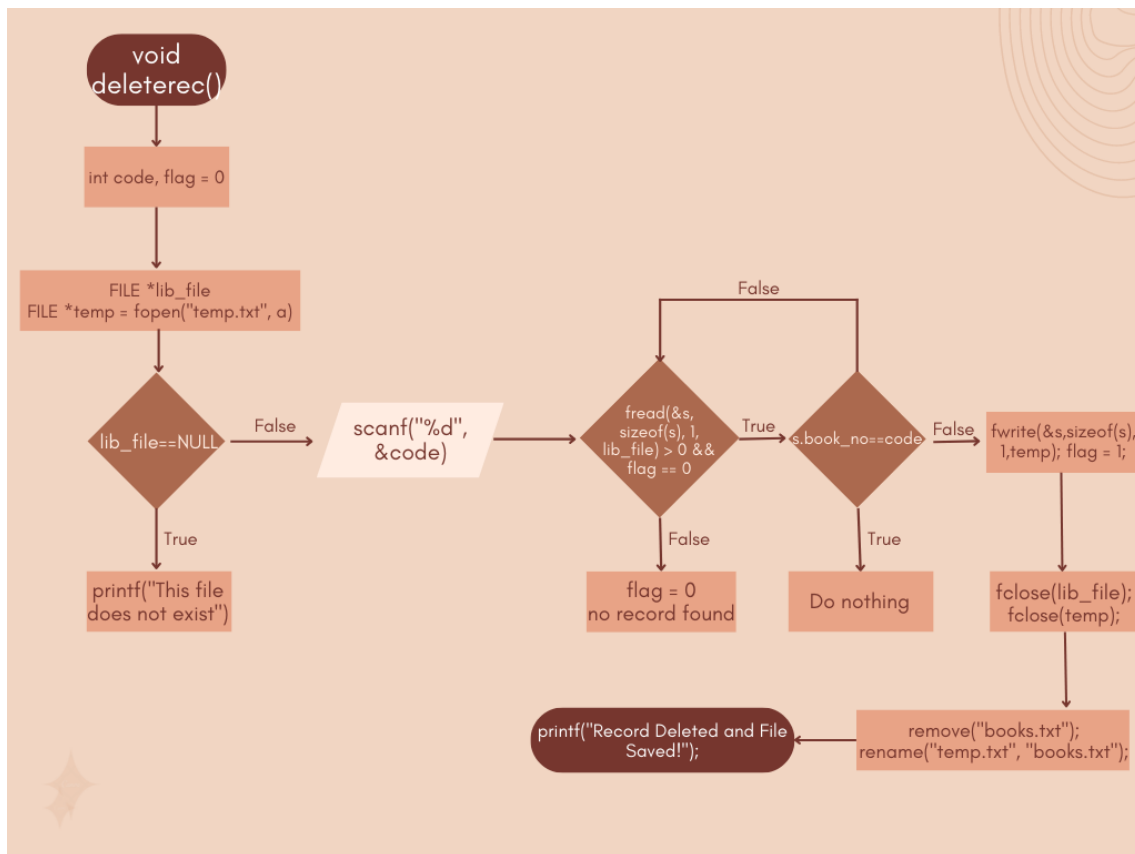
3. Flowchart for void search()



4. Flowchart for void displayall()



5. Flowchart for void deleterec()



The Code

```
1. #include <stdio.h>
2. #include <stdlib.h>
3.
4. void insert();
5. void search();
6. void displayall();
7. void deleterec();
8.
9. struct book
10. {
11.     int book_no;
12.     char title[50];
13.     char auth_name[50];
14. };
15.
16. struct book s;
17.
18. void main()
19. {
20.     int userch;
21.     while (userch != 5)
22.     {
23.         printf("\n\n");
24.         printf("\tWELCOME TO THE LIBRARY\n\n\n");
25.
26.         printf("\tChoose from one of the options below :\n\n");
27.         printf("\t\t1. Insert a Book Record\n");
28.         printf("\t\t2. Search for a Book Record\n");
29.         printf("\t\t3. Display all Book Records\n");
30.         printf("\t\t4. Delete a Book Record\n");
31.         printf("\t\t5. Exit\n\n");
32.         printf("\tEnter Your Choice : ");
33.         scanf("%d", &userch);
34.         switch (userch)
35.         {
36.             case 1:
37.                 system("clear");
38.                 insert();
39.                 break;
40.
41.             case 2:
42.                 system("clear");
43.                 search();
44.                 break;
45.
46.             case 3:
47.                 system("clear");
48.                 displayall();
49.                 break;
50.
51.             case 4:
52.                 system("clear");
53.                 deleterec();
54.                 break;
55.
56.             case 5:
57.                 exit(1);
58.                 break;
59.
```

```

60.         default:
61.             printf("\n\tPlease enter your choice according to the options!\n\n");
62.         }
63.     }
64. }
65.
66. void insert()
67. {
68.
69.     FILE *lib_file;
70.     lib_file = fopen("books.txt", "a+");
71.     printf("\n\n\tENTER BOOK DATA\n\n");
72.     printf("\t\tEnter Book Code : ");
73.     scanf("%d", &s.book_no);
74.     fflush(stdin);
75.     printf("\n\t\tEnter Book's Title : ");
76.     scanf("%s", s.title);
77.     printf("\n\t\tEnter Author's Name : ");
78.     scanf("%s", s.auth_name);
79.     fwrite(&s, sizeof(s), 1, lib_file);
80.     {
81.         printf("\n\n\tRecorded Successfully!\n\n");
82.     }
83.     fclose(lib_file);
84.     printf("\tFile Saved and Record Updated!\n\n");
85. }
86.
87. void search()
88. {
89.     int code, flag = 0;
90.     FILE *lib_file;
91.     lib_file = fopen("books.txt", "r");
92.     if (lib_file == NULL)
93.     {
94.         printf("\n\t\tThis file does not exist.");
95.         return;
96.     }
97.     printf("\n\n\tEnter the code of the book you want to search for : ");
98.     scanf("%d", &code);
99.     while (fread(&s, sizeof(s), 1, lib_file) > 0 && flag == 0)
100.    {
101.        if (s.book_no == code)
102.        {
103.            flag = 1;
104.            printf("\n\n\tHere are the book details :\n");
105.            printf("\n\t\tBook Code: %d", s.book_no);
106.            printf("\n\t\tTitle of the Book: %s", s.title);
107.            printf("\n\t\tName of the Author: %s\n\n", s.auth_name);
108.        }
109.    }
110.    if (flag == 0)
111.    {
112.        printf("\n\n\tRecord Doesn't Exist!\n\n");
113.    }
114.    fclose(lib_file);
115. }
116.
117. void displayall()
118. {
119.     int code, size = 0;
120.
121.     FILE *lib_file;
122.     lib_file = fopen("books.txt", "r");
123.     if (lib_file == NULL)

```

```

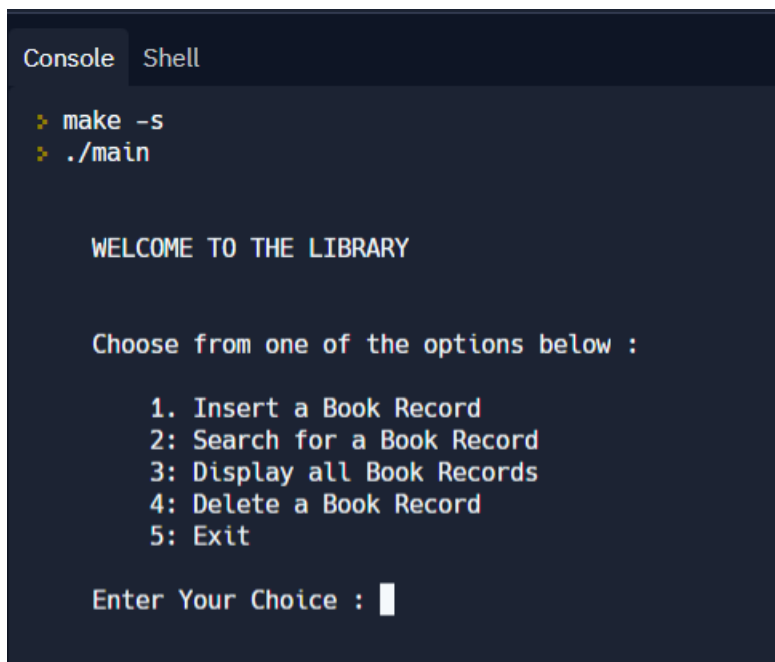
124.     {
125.         printf("\n\t\tThis file does not exist.");
126.         return;
127.     }
128.
129.     if (lib_file != NULL)
130.     {
131.         fseek (lib_file, 0, SEEK_END);
132.         size = ftell (lib_file);
133.         rewind(lib_file);
134.     }
135.
136.     if(size==0)
137.     {
138.         printf("\tThe File is empty! Please enter some records first.\n");
139.     }
140.
141.     else{
142.         printf("\n\n\tHere are the book details :\n");
143.         while (fread(&s, sizeof(s), 1, lib_file) > 0)
144.         {
145.             printf("\n\t\tBook Code: %d", s.book_no);
146.             printf("\n\t\tTitle of the Book: %s",s.title);
147.             printf("\n\t\tName of the Author: %s\n\n",s.auth_name);
148.         }
149.
150.         fclose(lib_file);
151.     }
152. }
153.
154. void deleterec()
155. {
156.     int code, flag = 0;
157.     FILE *lib_file;
158.     FILE *temp = fopen("temp.txt","a");
159.     lib_file = fopen("books.txt", "r");
160.     if (lib_file == NULL)
161.     {
162.         printf("\n\t\tThis file does not exist.");
163.         return;
164.     }
165.     printf("\n\n\tEnter the code of the book you want to delete : ");
166.     scanf("%d", &code);
167.
168.     while (fread(&s, sizeof(s), 1, lib_file) > 0 && flag == 0)
169.     {
170.         if (s.book_no == code)
171.         {
172.
173.         }
174.
175.         else
176.         {
177.             fwrite(&s,sizeof(s),1,temp);
178.             flag = 1;
179.         }
180.     }
181.
182.     if (flag == 0)
183.     {
184.         printf("\n\n\tRecord Doesn't Exist!\n\n");
185.     }
186.
187.     fclose(lib_file);

```

```
188.     fclose(temp);
189.     remove("books.txt");
190.         rename("temp.txt", "books.txt");
191.     printf("\tRecord Deleted and File Saved!\n\n");
192.
193. }
```

Execution of The Code

1. The main menu of the program



```
Console Shell
> make -s
> ./main

WELCOME TO THE LIBRARY

Choose from one of the options below :

1. Insert a Book Record
2. Search for a Book Record
3. Display all Book Records
4. Delete a Book Record
5. Exit

Enter Your Choice : █
```


2. Entered "1" as choice (adding record)

```
Console Shell

ENTER BOOK DATA

Enter Book Code : 1

Enter Book's Title : HarryPotter

Enter Author's Name : Rowling

Recorded Successfully!

File Saved and Record Updated!

WELCOME TO THE LIBRARY

Choose from one of the options below :

1. Insert a Book Record
2: Search for a Book Record
3: Display all Book Records
4: Delete a Book Record
5: Exit

Enter Your Choice : █
```

3. Entered "2" as choice (searching for record)

```
Console Shell

Enter the code of the book you want to search for : 1

Here are the book details :

Book Code: 1
Title of the Book: HarryPotter
Name of the Author: Rowling

WELCOME TO THE LIBRARY

Choose from one of the options below :

1. Insert a Book Record
2: Search for a Book Record
3: Display all Book Records
4: Delete a Book Record
5: Exit

Enter Your Choice : █
```

4. Added another record and entered “3” as choice (display all records)

```
Console Shell

Here are the book details :

Book Code: 1
Title of the Book: HarryPotter
Name of the Author: Rowling

Book Code: 2
Title of the Book: PercyJackson
Name of the Author: Riordan

WELCOME TO THE LIBRARY

Choose from one of the options below :

1. Insert a Book Record
2: Search for a Book Record
3: Display all Book Records
4: Delete a Book Record
5: Exit

Enter Your Choice : █
```

5. Entered “5” as choice (deleting record)

```
Console Shell

Enter the code of the book you want to delete : 2
Record Deleted and File Saved!

WELCOME TO THE LIBRARY

Choose from one of the options below :

1. Insert a Book Record
2: Search for a Book Record
3: Display all Book Records
4: Delete a Book Record
5: Exit

Enter Your Choice : █
```

6. Displaying records after deleting record number “2” and exiting using “5” as choice

```

Console Shell

Here are the book details :

Book Code: 1
Title of the Book: HarryPotter
Name of the Author: Rowling


WELCOME TO THE LIBRARY


Choose from one of the options below :

1. Insert a Book Record
2: Search for a Book Record
3: Display all Book Records
4: Delete a Book Record
5: Exit


Enter Your Choice : 5
exit status 1

```

[illegible]