CODE:

```c
// C program for the E-library Management System
#include <stdio.h>
#include <stdlib.h>
#include <string.h>

// Create Structure of Library
struct library {
        char book_name[20];
        char author[20];
        int pages;
        float price;
};

// Driver Code
int main()
{
        // Create a instance
        struct library lib[100];

        char ar_nm[30], bk_nm[30];

        // Keep the track of the number of
        // of books available in the library
        int i, input, count;

        i = input = count = 0;

        // Iterate the loop
        while (input != 5) {
```

```c
printf("\n\n*********###### WELCOME TO E-LIBRARY #####*********\n");

printf("\n\n1. Add book information\n2. Display book information\n");

printf("3. List all books of given author\n");

printf(
        "4. List the count of books in the library\n");

printf("5. Exit");


// Enter the book details

printf("\n\nEnter one of the above: ");

scanf("%d", &input);


// Process the input

switch (input) {


// Add book

case 1:


        printf("Enter book name = ");

        scanf("%s", lib[i].book_name);


        printf("Enter author name = ");

        scanf("%s", lib[i].author);


        printf("Enter pages = ");

        scanf("%d", &lib[i].pages);


        printf("Enter price = ");

        scanf("%f", &lib[i].price);

        count++;


        break;
```

```c
// Print book information
case 2:
        printf("you have entered the following information\n");
        for (i = 0; i < count; i++) {


                printf("book name = %s",
                        lib[i].book_name);


                printf("\t author name = %s",
                        lib[i].author);


                printf("\t pages = %d",
                        lib[i].pages);


                printf("\t price = %f",
                        lib[i].price);
        }
        break;


// Take the author name as input
case 3:
        printf("Enter author name : ");
        scanf("%s", ar_nm);
        for (i = 0; i < count; i++) {


                if (strcmp(ar_nm,

                                lib[i].author)

                        == 0)
                        printf("%s %s %d %f",

                                lib[i].book_name,
```

```c
                                        lib[i].author,

                                        lib[i].pages,

                                        lib[i].price);

                        }

                        break;


                // Print total count
                case 4:

                        printf("\n No. of books in Library : %d",count);

                        break;

                case 5:

                        exit(0);

                }

        }

        return 0;

}
```

EXPLAINATION:

This is an E-Library Management System where the user has the following options:

- Add book information.
- Display book information.
- To list all books of a given author.
- To list the count of books in the library.

Functionalities Required:
If the user tries to add a book then the user must have to provide the below specific Information about the book as:
- Enter Book Name:
- Enter Author Name:
- Enter Pages:
- Enter Price:
- When the user tries to display all books of a particular author then the user must have to enter the name of the author:
  - Enter the author name:
- The E-Library management System must be also capable of counting all the books available in the library.