

```

#include <stdio.h>

#include <stdlib.h>

#include <string.h>


#define FILENAME "addressbook.txt"


struct Person {
    char name[50];
    char phone[15];
    char email[50];
};


// Function to create a new address book (clears existing file)
void createAddressBook() {
    FILE *fp = fopen(FILENAME, "w");
    if (!fp) {
        printf("Error creating address book file!\n");
        return;
    }
    fclose(fp);
    printf("New Address Book created successfully.\n");
}


// Function to view all records
void viewAddressBook() {
    FILE *fp = fopen(FILENAME, "r");
    struct Person p;
    if (!fp) {
        printf("No address book found. Create one first.\n");
        return;
    }
}

```

```

printf("\n---- Address Book ----\n");
while (fread(&p, sizeof(struct Person), 1, fp)) {
    printf("Name : %s\n", p.name);
    printf("Phone: %s\n", p.phone);
    printf("Email: %s\n", p.email);
    printf("-----\n");
}
fclose(fp);
}

```

// Function to insert a new record

```

void insertRecord() {
    FILE *fp = fopen(FILENAME, "ab");
    struct Person p;

    if (!fp) {
        printf("Error opening file.\n");
        return;
    }

    printf("Enter name: ");
    scanf("%[^\\n]", p.name);
    printf("Enter phone: ");
    scanf("%[^\\n]", p.phone);
    printf("Enter email: ");
    scanf("%[^\\n]", p.email);

    fwrite(&p, sizeof(struct Person), 1, fp);
    fclose(fp);
    printf("Record added successfully.\n");
}

```

```
}
```

```
// Function to delete a record by name
```

```
void deleteRecord() {
```

```
    FILE *fp = fopen(FILENAME, "rb");
```

```
    FILE *temp = fopen("temp.txt", "wb");
```

```
    struct Person p;
```

```
    char name[50];
```

```
    int found = 0;
```

```
    if (!fp) {
```

```
        printf("No address book found.\n");
```

```
        return;
```

```
    }
```

```
    printf("Enter name to delete: ");
```

```
    scanf("%s", name);
```

```
    while (fread(&p, sizeof(struct Person), 1, fp)) {
```

```
        if (strcmp(p.name, name) != 0) {
```

```
            fwrite(&p, sizeof(struct Person), 1, temp);
```

```
        } else {
```

```
            found = 1;
```

```
        }
```

```
    }
```

```
    fclose(fp);
```

```
    fclose(temp);
```

```
    remove(FILENAME);
```

```
    rename("temp.txt", FILENAME);
```

```
if (found)
    printf("Record deleted successfully.\n");
else
    printf("Record not found.\n");
}
```

```
// Function to modify a record
```

```
void modifyRecord() {
    FILE *fp = fopen(FILENAME, "rb+");

    struct Person p;
    char name[50];
    int found = 0;

    if (!fp) {
        printf("No address book found.\n");
        return;
    }
```

```
    printf("Enter name to modify: ");
    scanf("%s", name);
```

```
    while (fread(&p, sizeof(struct Person), 1, fp)) {
        if (strcmp(p.name, name) == 0) {
            printf("Enter new name: ");
            scanf("%s", p.name);
            printf("Enter new phone: ");
            scanf("%s", p.phone);
            printf("Enter new email: ");
            scanf("%s", p.email);
```

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        fseek(fp, -sizeof(struct Person), SEEK_CUR);

        fwrite(&p, sizeof(struct Person), 1, fp);

        found = 1;

        break;
    }
}

fclose(fp);

if (found)
    printf("Record modified successfully.\n");
else
    printf("Record not found.\n");
}

// ----- MAIN FUNCTION -----
int main() {
    int choice;

    while (1) {
        printf("\n===== ADDRESS BOOK MENU =====\n");
        printf("1. Create Address Book\n");
        printf("2. View Address Book\n");
        printf("3. Insert Record\n");
        printf("4. Delete Record\n");
        printf("5. Modify Record\n");
        printf("6. Exit\n");
        printf("Enter your choice: ");
        scanf("%d", &choice);

        switch (choice) {
            case 1: createAddressBook(); break;

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        case 2: viewAddressBook(); break;

        case 3: insertRecord(); break;

        case 4: deleteRecord(); break;

        case 5: modifyRecord(); break;

        case 6: printf("Exiting...\n"); exit(0);

        default: printf("Invalid choice! Try again.\n");

    }

}

return 0;

}
```

Output

===== ADDRESS BOOK MENU =====

1. Create Address Book
2. View Address Book
3. Insert Record
4. Delete Record
5. Modify Record
6. Exit

Enter your choice: 1

New Address Book created successfully.

Enter your choice: 3

Enter name: Vaishnavi

Enter phone: 9876543210

Enter email: vaishnavi@gmail.com

Record added successfully.

Enter your choice: 2

---- Address Book ----

Name : Vaishnavi

Phone: 9876543210

Email: vaishnavi@gmail.com

Enter your choice: 5

Enter name to modify: Vaishnavi

Enter new name: Vaishnavi Jadhav

Enter new phone: 9823456789

Enter new email: vaishnavi.j@gmail.com

Record modified successfully.

Enter your choice: 4

Enter name to delete: Vaishnavi Jadhav

Record deleted successfully.

Enter your choice: 6

Exiting...