

Aim:

Write a program to implement an address book with options given below:

- a) Create an address book.
- b) View address book.
- c) Insert a record.
- d) Delete a record.
- e) Modify a record.
- f) Exit

Source Code:

```
#include<iostream>
#include<stdlib.h>
using namespace std;
class AddressBook
{
int Sr_No;
char name[20];
char addr[20];
long phno;
public:
    int Insert (AddressBook *p,int n)
    {
        cout<<"Enter Sr No: ";
        cin>>p[n].Sr_No;
        cout<<"Enter Name: ";
        cin>>p[n].name;
        cout<< "Enter Address: ";
        cin>>p[n].addr;
        cout<<"Enter Contact: ";
        cin>>p[n].phno;
        cout<<"\nRECORD INSERTED...\n";
        n++;
        return n;
    }

    int Display(){
        cout<<Sr_No<<"\t"<<name<<"\t"<<addr<<"\t"<<phno<<"\n";
        return 0;
    }
}
```

```

int Del(AddressBook *p,int n,int roll)
{
    int j=0,k,flag=0;
    for(j=0;j<n;j++)
    {
        if(p[j].Sr_No==roll)
        {
            flag=1;
            break;
        }
    }
    if(flag==1)
    {
        for(k=j;k<n;k++)
        {
            p[k]=p[k+1];
        }
        cout<<"\nRECORD DELETED.\n";
        return n-1;
    }
    else
    {
        cout<<"\nRecord Not Found\n";
        return n;
    }
}

int Update(AddressBook *p,int roll,int n)
{
    int i,ch1;
    for(i=0;i<n;i++)
    {
        if(p[i].Sr_No==roll)
        {
            while(1){
                cout<<"\n*****Modify Options****\n";
                cout<<"\n 1. Update Address";
                cout<<"\n 2. Update Conatct";
                cout<<"\n 3. Update Both";
                cout<<"\n 4. Return to main Menu";
                cout<<"\n\n Enter Your Choice:";
            }
        }
    }
}

```

```

        cin>>ch1;
        switch(ch1){
            case 1: cout<<"Address:";
                    cin>>p[i].addr;
                    cout<<"Record Updated...\n";
                    break;
            case 2: cout<<"Contact:\t";
                    cin>>p[i].phno;
                    cout<<"Record Updated...\n";
                    break;
            case 3: cout<<"Address:";
                    cin>>p[i].addr;
                    cout<<"Contact:\t";
                    cin>>p[i].phno;
                    cout<<"Record Updated...\n";
                    break;
            case 4: return n;
            default: cout<<"!! Wrong Key !!";
                    break;
        }
    }
    break;
}

if(p[i].Sr_No!=roll)
{
    cout<<"\nRecord Not Found\n\n";
}
return 0;
}

};

int main()
{
    AddressBook o[10];
    int i=0,ch,j,roll;
    while(1)
    {
        cout<<"\n*****Address Book*****";

```

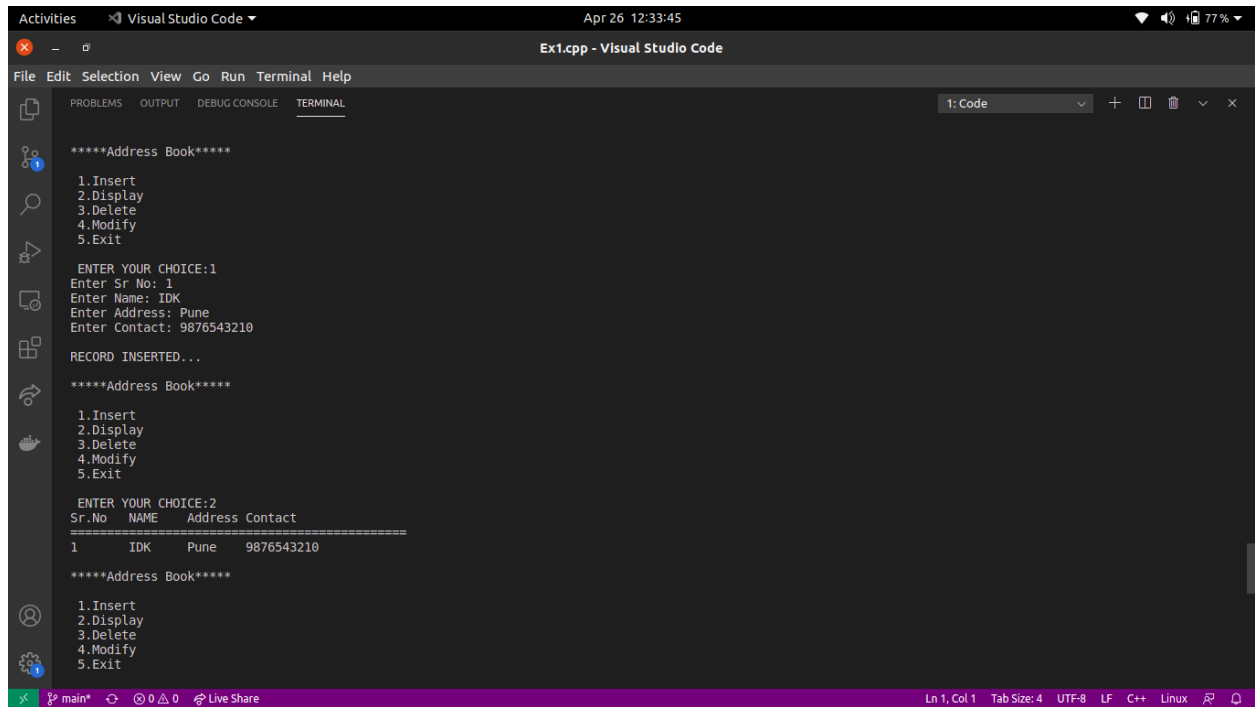
```

cout<<"\n";
cout<< "\n 1.Insert";
cout<< "\n 2.Display";
cout<< "\n 3.Delete";
cout<< "\n 4.Modify";
cout<< "\n 5.Exit";
cout<< "\n\n ENTER YOUR CHOICE:";
cin>> ch;
switch(ch){
    case 1: i=o[0].Insert(o,i);
            break;
    case 2:
cout<<"Sr.No\tNAME\tAddress\tContact\n=====
=====\\n";
        for(j=0;j<i;j++){
            o[j].Display();
        }
        break;
    case 3:
        cout<<"Enter the Sr No to Delete:";
        cin>> roll;
        i=o[0].Del(o,i,roll);
        break;
    case 4:
        cout<<"Enter the Sr No For Data Update:";
        cin>> roll;
        i=o[0].Update(o,roll,i);
        break;
    case 5: exit(0);
    default: cout<<"Wrong Key!!";
            break;

}
}
}

```

Output:



```
*****Address Book*****
1.Insert
2.Display
3.Delete
4.Modify
5.Exit

ENTER YOUR CHOICE:1
Enter Sr No: 1
Enter Name: IDK
Enter Address: Pune
Enter Contact: 9876543210

RECORD INSERTED...

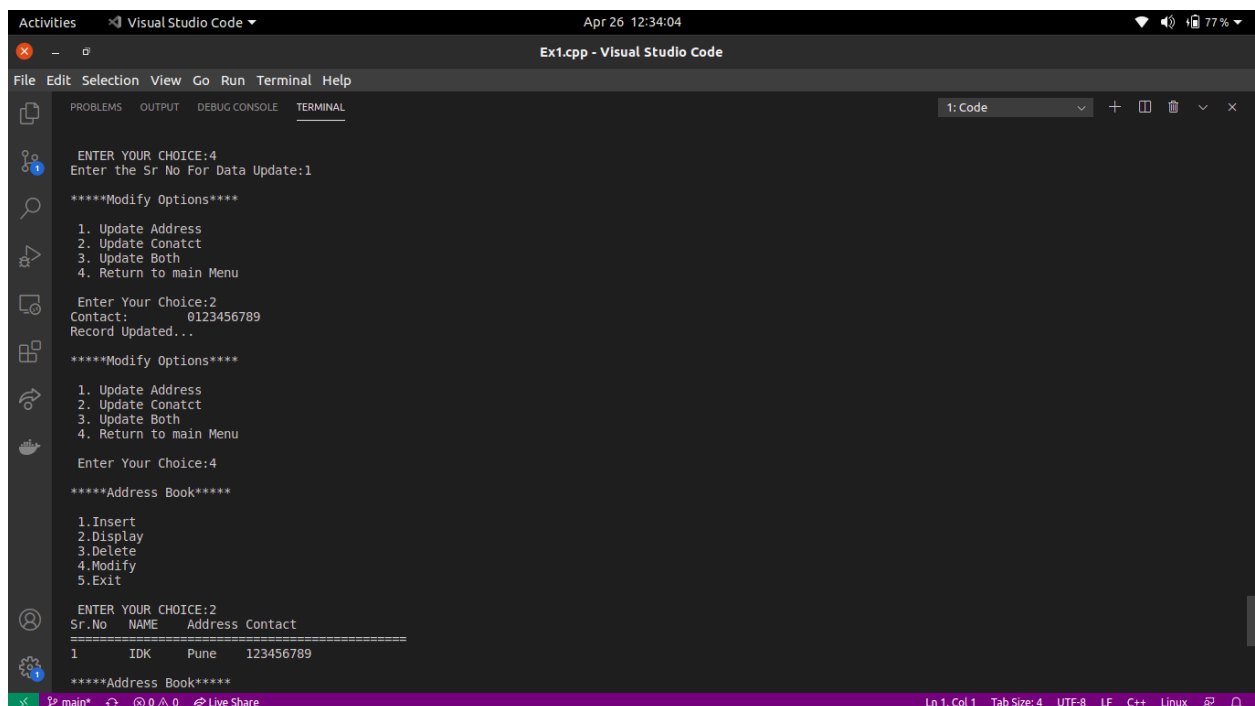
*****Address Book*****

1.Insert
2.Display
3.Delete
4.Modify
5.Exit

ENTER YOUR CHOICE:2
Sr.No  NAME  Address Contact
=====
1      IDK   Pune   9876543210

*****Address Book*****

1.Insert
2.Display
3.Delete
4.Modify
5.Exit
```



```
ENTER YOUR CHOICE:4
Enter the Sr No For Data Update:1

*****Modify Options*****

1. Update Address
2. Update Conatct
3. Update Both
4. Return to main Menu

Enter Your Choice:2
Contact: 0123456789
Record Updated...

*****Modify Options*****

1. Update Address
2. Update Conatct
3. Update Both
4. Return to main Menu

Enter Your Choice:4

*****Address Book*****

1.Insert
2.Display
3.Delete
4.Modify
5.Exit

ENTER YOUR CHOICE:2
Sr.No  NAME  Address Contact
=====
1      IDK   Pune   123456789

*****Address Book*****
```

Activities Visual Studio Code Apr 26 12:34:26 77%

Ex1.cpp - Visual Studio Code

File Edit Selection View Go Run Terminal Help

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL 1: Code

```
=====
1      IDK      Pune      123456789

*****Address Book*****

1.Insert
2.Display
3.Delete
4.Modify
5.Exit

ENTER YOUR CHOICE:3
Enter the Sr No to Delete:1

RECORD DELETED.

*****Address Book*****

1.Insert
2.Display
3.Delete
4.Modify
5.Exit

ENTER YOUR CHOICE:2
Sr.No  NAME      Address Contact
=====

*****Address Book*****

1.Insert
2.Display
3.Delete
4.Modify
5.Exit

ENTER YOUR CHOICE:5
shivam@2-0:~/Music/GHRIET/IT-4/SEM-IV/E05$
```

main* 0 0 0 Live Share Ln 1, Col 1 Tab Size: 4 UTF-8 LF C++ Linux