Practical: 23 **Write an interactive, menu-driven program that will access the file created in program No.18a and implement the following tasks:**

> **i)   To determine the telephone numbers of the specified person.**
> **ii) To determine the name if a telephone number is given.**
> **iii) To update the telephone number whenever there is a change.**

```cpp
#include<iostream>

#include<fstream>

#include<iomanip>

#include<string.h>

#include<stdlib.h>

using namespace std;

class phone

{

public:

    long no;

    char name[10];

    void getdata()

    {

        cout<<endl<<"Enter the name : ";

        cin>>name;

        cout<<endl<<"Enter the telephone number : ";

        cin>>no;

    }

    void putdata()

    {
```

```cpp
            cout<<endl<<setw(10)<<name<<endl<<setw(10)<<no<<endl;
    }
};
int main()
{
    phone ph;
    fstream f;
    int n;
    f.open("pp1.txt",ios::trunc|ios::in|ios::out|ios::ate);
    cout<<"Enter the number of records :";
    cin>>n;
    for(int i=0;i<n;i++)
    {
        ph.getdata();
        f.write((char *)&ph,sizeof(ph));
    }
    f.seekg(0);
    cout<<endl<<"Contents of the file are as follows ";
    while(f.read((char *)&ph,sizeof(ph)))
    ph.putdata();
    int choice;
    while(1)
    {
        cout<<"\n1.Get name from telephone number";
        cout<<"\n2.Get telephone number from name";
        cout<<"\n3.Alter the telephone number";
        cout<<"\n4.EXIT";
```

```cpp
        cout<<"\nEnter your choice ";

        cin>>choice;

        f.seekg(0);

        f.clear();

        switch(choice)

        {

            case 1: cout<<"\nEnter the telephone number to get the name
";

                int no;

                cin>>no;

                f.seekg(0);

                f.clear();

                while(f.read((char *)&ph,sizeof(ph)))

                {   if(ph.no==no)

                    {

                    ph.putdata();

                    }

                }

                break;

            case 2: cout<<"\nEnter the name to get the telephone number
";

                char search_name[10];

                cin>>search_name;

                while(f.read((char *)&ph,sizeof(ph)))

                {

                    if(strcmp(ph.name,search_name)==0)

                    ph.putdata();
```

```
                }

                break;

            case 3:cout<<"\nEnter the name to modify the telephone number
";

                char searchname[10];

                cin>>searchname;

                while(f.read((char *)&ph,sizeof(ph)))

                {

                    if(strcmp(ph.name,searchname)==0)

                    {

                        ph.putdata();

                        cout<<endl<<"Enter the new details to modify : ";

                        ph.getdata();

                        int loc=sizeof(ph);

                        int p=f.tellp();

                        cout<<endl<<p;

                        f.seekp(p-loc);

                        f.write((char *)&ph,sizeof(ph));

                    }

                }

                cout<<endl<<"After modification the content of the file
is as follows ";

                f.clear();

                f.seekg(0);

                while(f.read((char *)&ph,sizeof(ph)))

                ph.putdata();

                break;
```
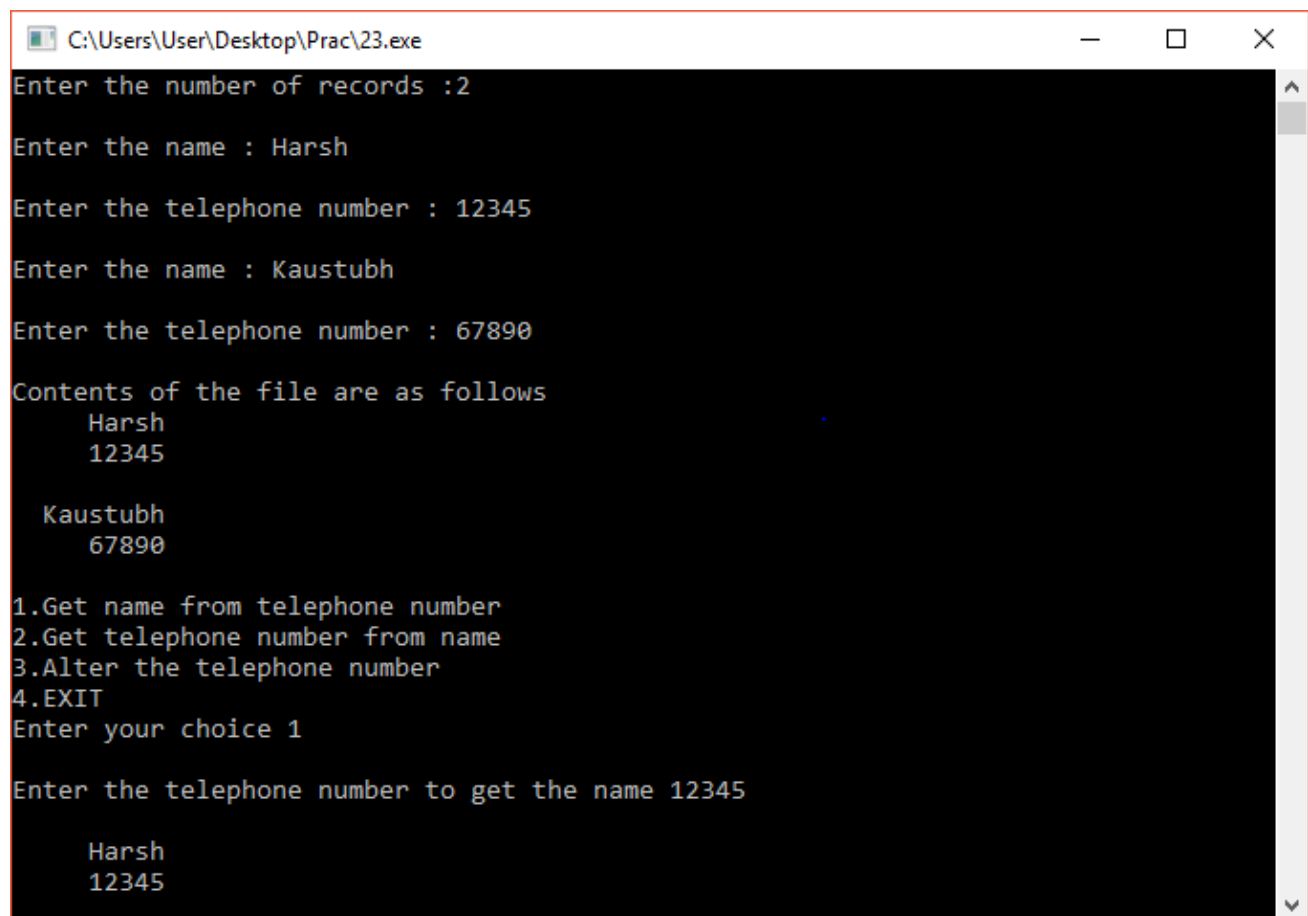
```
        case 4:exit(0);

        }

    }

    return 0;

}
```

Output 23

C:\Users\User\Desktop\Prac\23.exe

```
Enter the number of records :2

Enter the name : Harsh

Enter the telephone number : 12345

Enter the name : Kaustubh

Enter the telephone number : 67890

Contents of the file are as follows
    Harsh
    12345

  Kaustubh
    67890

1.Get name from telephone number
2.Get telephone number from name
3.Alter the telephone number
4.EXIT
Enter your choice 1

Enter the telephone number to get the name 12345

    Harsh
    12345
```