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

1. **To determine the telephone numbers of the specified person.**
2. **To determine the name if a telephone number is given.**
3. **To update the telephone number whenever there is a change.**

#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()

{

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";

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**

