**Assignment No.9(Phone Directory).**

#include <iostream>

#include<fstream>

#include<string.h>

using namespace std;

class phonebook{

public:

char name[30];

char number[20];

void accept(){

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

cin>>name;

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

cin>>number;}

void display(){

cout<<endl<<"Name:"<<name;

cout<<endl<<"Number:"<<number;}

};

int main(){

phonebook ph;

fstream f;

int ch,num;

do{

cout<<endl<<"1.Create...\n2.Display...\n3.Add...\n4.Search...\n5.Update...\n6.Exit...";

cout<<endl<<"Enter your choice:";

cin>>ch;

switch(ch){

case 1:{

cout<<endl<<"Enter number of records do you want enter:";

cin>>num;

f.open("phone",ios::out);

for(int i=0;i<num;i++){

ph.accept();

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

f.close();

break;}

case 2:{

f.open("phone",ios::in);

for(int i=0;i<num;i++){

f.read((char\*)&ph,sizeof(ph));

ph.display();}

f.close();

break;

}

case 3:{

f.open("phone",ios::app);

ph.accept();

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

num++;

f.close();

break;

}

case 4:{

string str,str1;

int flag=0;

cout<<endl<<"Enter name do you want to search:";

cin>>str;

f.open("phone",ios::in);

for(int i=0;i<num;i++){

f.read((char\*)&ph,sizeof(ph));

str1=(string)ph.name;

if(str==str1){

flag=1;

break;}}

if(flag==1){

cout<<endl<<"Record Searched successfully!!";

ph.display();

}else{

cout<<endl<<"No record found!!";}

f.close();

break;

}

case 5:

string str,str1;

cout<<endl<<"Enter name do you want to enter:";

cin>>str;

f.open("phone",ios::in|ios::out);

f.seekg(0,ios::beg);

for(int i=0;i<num;i++){

f.read((char\*)&ph,sizeof(ph));

str1=(string)ph.name;

if(str==str1){

f.seekp(i\*sizeof(ph),ios::beg);

ph.accept();

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

f.close();

break;

}

}while(ch!=6);

return 0;

}

**Output:**

1.Create...

2.Display...

3.Add...

4.Search...

5.Update...

6.Exit...

Enter your choice:1

Enter number of records do you want enter:4

Enter name:rohit

Enter number:123

Enter name:akkie

Enter number:456

Enter name:sagya

Enter number:678

Enter name:Ritya

Enter number:890

1.Create...

2.Display...

3.Add...

4.Search...

5.Update...

6.Exit...

Enter your choice:2

Name:rohit

Number:123

Name:akkie

Number:456

Name:sagya

Number:678

Name:Ritya

Number:890

1.Create...

2.Display...

3.Add...

4.Search...

5.Update...

6.Exit...

Enter your choice:3

Enter name:tejas

Enter number:444

1.Create...

2.Display...

3.Add...

4.Search...

5.Update...

6.Exit...

Enter your choice:2

Name:rohit

Number:123

Name:akkie

Number:456

Name:sagya

Number:678

Name:Ritya

Number:890

Name:tejas

Number:444

1.Create...

2.Display...

3.Add...

4.Search...

5.Update...

6.Exit...

Enter your choice:4

Enter name do you want to search:rohit

Record Searched successfully!!

Name:rohit

Number:123

1.Create...

2.Display...

3.Add...

4.Search...

5.Update...

6.Exit...

Enter your choice:5

Enter name do you want to enter:tejas

Enter name:teja

Enter number:555

1.Create...

2.Display...

3.Add...

4.Search...

5.Update...

6.Exit...

Enter your choice:2

Name:rohit

Number:123

Name:akkie

Number:456

Name:sagya

Number:678

Name:Ritya

Number:890

Name:teja

Number:555