

## Open Ended Problem

Develop an object oriented system “Visiting Card Management” which allows user to add, delete and update and search the visiting card details.

```
#include<fstream.h>
#include<iostream.h>
#include<ctype.h>
#include<iomanip.h>
#include<conio.h>
#include<stdio.h>
class account
{
    int id;
    char name[50];
    char address[100];
    char occupation[30];
    char contact[18];
    char email[50];
public:
    void create(); //function to get data from user
    void show();   //function to show data on screen
    void modify(); //function to get new data from user
    void report(); //function to show all data
    int retid();   //function to return ID
};
void account::create()
{
    cout<<"\nID. :";
    cin>>id;
```

```
    cout<<"\n\nEnter your Name : ";
    gets(name);
    cout<<"\nEnter your Occupation : ";
    gets(occupation);
    cout<<"\nEnter the Address for visiting card : ";
    gets(address);
    cout<<"\nEnter Contact Number : ";
    gets(contact);
    cout<<"\nEnter Email ID : ";
    gets(email);
    cout<<"\n\n\nAccount Created..";
}

void account::show()
{
    cout<<"\nID. : "<<id;
    cout<<"\nName : ";
    cout<<name;
    cout<<"\nOccupation : "<<occupation;
    cout<<"\nAddress : "<<address;
    cout<<"\nContact : "<<contact;
    cout<<"\nEmail ID : "<<email;
}

void account::modify()
{
    cout<<"\nID. :";
    cin>>id;
    cout<<"\n\nEnter your Name : ";
    gets(name);
    cout<<"\nEnter your Occupation : ";
    gets(occupation);
```

```
        cout<<"\nEnter the Address for visiting card : ";
        gets(address);
        cout<<"\nEnter Contact Number : ";
        gets(contact);
        cout<<"\nEnter Email ID : ";
        gets(email);
        cout<<"\n\n\nAccount Modified..";
    }
    void account::report()
    {
        cout<<id<<setw(7)<<" "<<name<<setw(10)<<" "<<occupation<<endl;
    }
    int account::retid()
    {
        return id;
    }

    void write_file();           //function to write record in binary file
    void display(int);           //function to display account details given by
    user
    void modify_file(int);       //function to modify record of file
    void delete_file(int);       //function to delete record of file
    void display_all();          //function to display all account details
    void intro();                //introductory screen function

    int main()
    {
        int ch;
        int num;
        clrscr();
```

```
intro();
do
{
    clrscr();
    cout<<"\n\n\n\tMAIN MENU";
    cout<<"\n\n\t01. NEW VISITING CARD";
    cout<<"\n\n\t02. ALL CARD HOLDER LIST";
    cout<<"\n\n\t03. DELETE CARD";
    cout<<"\n\n\t04. MODIFY VISITING CARD";
    cout<<"\n\n\t05. SHOW DETAIL OF VISITING CARD";
    cout<<"\n\n\t06. EXIT";
    cout<<"\n\n\tSelect Your Option (1-6) ";
    cin>>ch;
    clrscr();
    switch(ch)
    {
        case 1:
            write_file();
            cout<<"\nDO REMEBER YOUR VISITING CARD ID!";
            break;
        case 2:
            display_all();
            break;
        case 3:
            cout<<"\n\n\tEnter unique ID. : "; cin>>num;
            delete_file(num);
            break;
        case 4:
            cout<<"\n\n\tEnter Unique ID. : "; cin>>num;
            modify_file(num);
```

```
        break;
    case 5:
        cout<<"\n\n\tEnter The account No. : "; cin>>num;
        display(num);
        break;
    case 6:
        cout<<"\n\n\tThanks for using Visting card managemnt
system";

        break;
    default :cout<<"\a";
    }
    getch();
}while(ch!=6);
    return 0;
}
```

```
void write_file()
{
    account ac;
    ofstream outFile;
    outFile.open("visting.txt",ios::binary|ios::app);
    ac.create();
    outFile.write((char *) &ac, sizeof(account));
    outFile.close();
}
```

```
void display(int n)
{
    account ac;
    int flag=0;
```

```
    ifstream inFile;
    inFile.open("visting.txt",ios::binary);
    if(!inFile)
    {
        cout<<"File could not be open !! Press any Key...";
        return;
    }
    cout<<"\n*****VISITING CARD*****\n";
    while(inFile.read((char *) &ac, sizeof(account)))
    {
        if(ac.retid()==n)
        {
            ac.show();
            flag=1;
        }
    }
    inFile.close();
    if(flag==0)
        cout<<"\n\nAccount number does not exist";
}
```

```
void modify_file(int n)
{
    int found=0;
    account ac;
    fstream File;
    File.open("visting.txt",ios::binary|ios::in|ios::out);
    if(!File)
    {
        cout<<"File could not be open !! Press any Key...";
    }
}
```

```
        return;
    }
    File.seekg(0,ios::beg);
    while(File.read((char *) &ac, sizeof(account)) && found==0)
    {
        if(ac.retid()==n)
        {
            ac.show();
            cout<<"\n\nEnter The New Details of account"<<endl;
            ac.modify();
            int pos=(-1)*sizeof(account);
            File.seekp(pos,ios::cur);
            File.write((char *) &ac, sizeof(account));
            cout<<"\n\n\t Record Updated";
            found=1;
        }
    }
    File.close();
    if(found==0)
        cout<<"\n\n Record Not Found ";
}
```

```
void delete_file(int n)
{
    account ac;
    ifstream inFile;
    ofstream outFile;
    inFile.open("visting.txt",ios::binary);
    if(!inFile)
    {
```

```
        cout<<"File could not be open !! Press any Key...";
        return;
    }
    outFile.open("Temp.txt",ios::binary);
    inFile.seekg(0,ios::beg);
    while(inFile.read((char *) &ac, sizeof(account)))
    {
        if(ac.retid()!=n)
        {
            outFile.write((char *) &ac, sizeof(account));
        }
    }
    inFile.close();
    outFile.close();
    remove("visting.txt");
    rename("Temp.txt","visting.txt");
    cout<<"\n\n\tRecord Deleted ..";
}
```

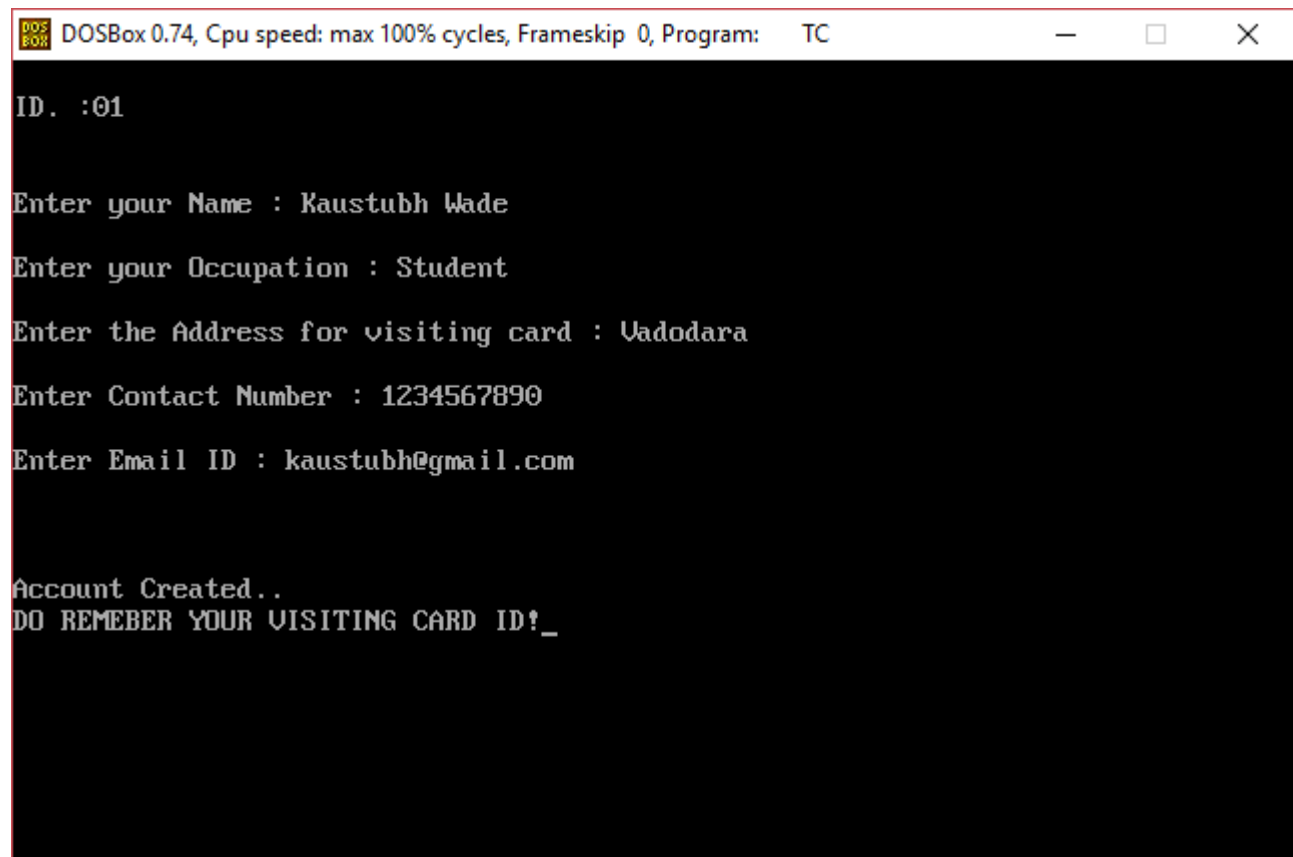
```
void display_all()
{
    account ac;
    ifstream inFile;
    inFile.open("visting.txt",ios::binary);
    if(!inFile)
    {
        cout<<"File could not be open !! Press any Key...";
        return;
    }
    cout<<"\n\n\t\tVISITING CARD LIST\n\n";
```



```
cout<<"=====\\n";  
==\\n";  
  
    cout<<"ID"<<setw(8)<<" "<<"NAME"<<setw(15)<<" "<<"OCCUPATION"<<endl;  
    cout<<"=====\\n";  
==\\n";  
  
    while(inFile.read((char *) &ac, sizeof(account)))  
    {  
        ac.report();  
    }  
    inFile.close();  
}  
  
void intro()  
{  
    cout<<"\\n\\n\\n\\t\\t\\t VISITING CARD";  
    cout<<"\\n\\n\\t\\t MANAGEMENT\\n";  
    cout<<" \\t\\t SYSTEM";  
    getch();  
}
```

**Output:**

Add User



```
DOSBox 0.74, Cpu speed: max 100% cycles, Frameskip 0, Program: TC

ID. :01

Enter your Name : Kaustubh Wade
Enter your Occupation : Student
Enter the Address for visiting card : Vadodara
Enter Contact Number : 1234567890
Enter Email ID : kaustubh@gmail.com

Account Created..
DO REMEBER YOUR VISITING CARD ID!_
```

```
DOSBox 0.74, Cpu speed: max 100% cycles, Frameskip 0, Program: TC

      VISITING CARD LIST

=====
ID      NAME      OCCUPATION
=====
1      Kaustubh Wade      Student
2      ABC      STUDENT
3      NIKS      BLOGGER
```

### Delete User

```
DOSBox 0.74, Cpu speed: max 100% cycles, Frameskip 0, Program: TC

Enter unique ID. : 2

Record Deleted ..
```

```
DOSBox 0.74, Cpu speed: max 100% cycles, Frameskip 0, Program: TC

VISITING CARD LIST

=====
ID      NAME      OCCUPATION
=====
1      Kaustubh Wade  Student
3      NIKS      BLOGGER
-

```

## Update User

```
DOSBox 0.74, Cpu speed: max 100% cycles, Frameskip 0, Program: TC

Occupation : BLOGGER
Address : ASDSDUDAUURTUBTRBRTBTRBTRBTRB
Contact : 0192837465
Email ID : GRFEDW@REDIFFMAIL.COM

Enter The New Details of account

ID. :2

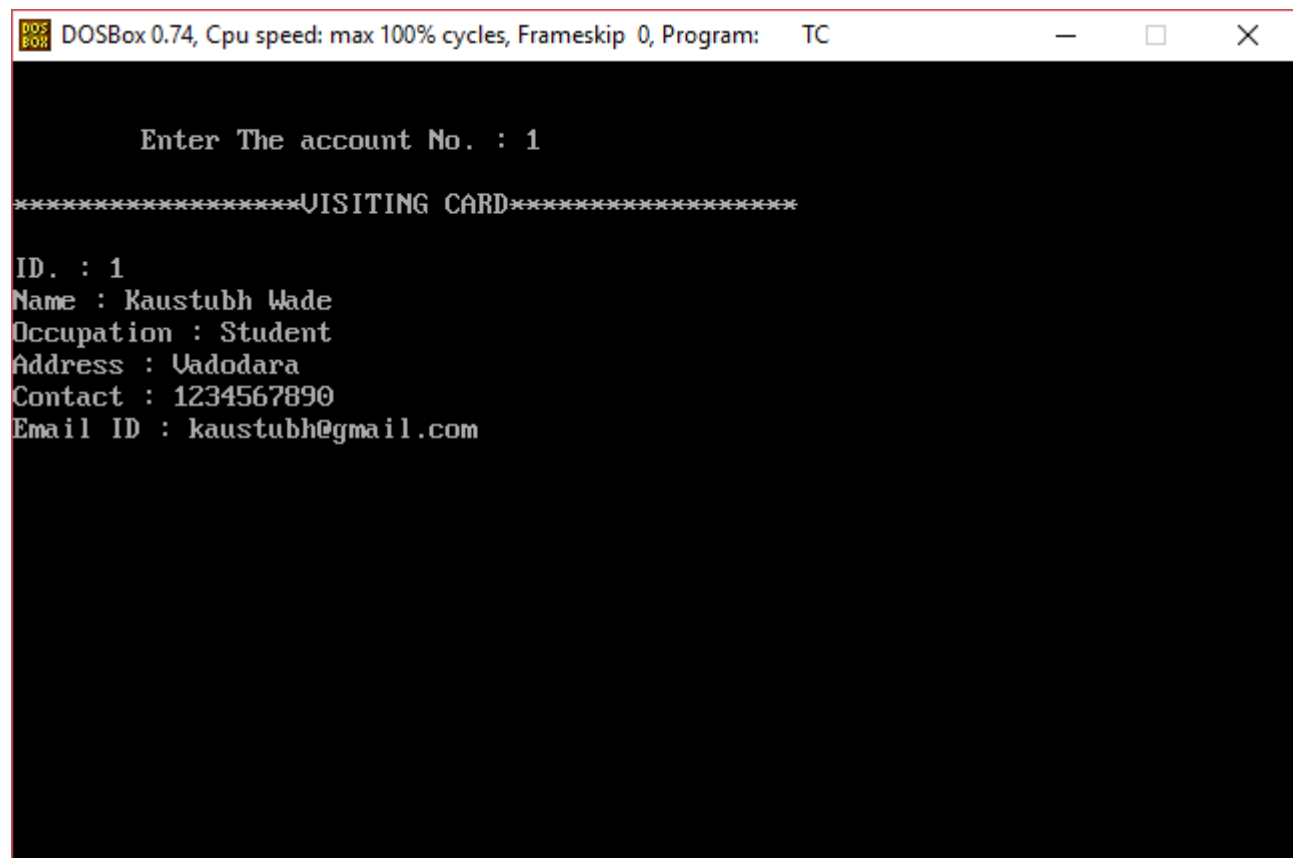
Enter your Name : NIK
Enter your Occupation : BLOGGER
Enter the Address for visiting card : CEWCECECECECE
Enter Contact Number : 0192837465
Enter Email ID : ERCUWERUCEWRUREU@REDIFFMAIL.COM

Account Modified..

Record Updated_

```

## Search User



```
DOSBox 0.74, Cpu speed: max 100% cycles, Frameskip 0, Program: TC

Enter The account No. : 1

*****VISITING CARD*****

ID. : 1
Name : Kaustubh Wade
Occupation : Student
Address : Vadodara
Contact : 1234567890
Email ID : kaustubh@gmail.com
```