Mini Project Report

on

"GAS AGENCY ADMINISTRATION SYSTEM"

Submitted to

Ajay Kumar Garg Engineering College, Ghaziabad

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(KSC-554 Project Mini Project or Internship Assessment Report)

Submitted To: -

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ACKNOWLEDGEMENT

We would like to express our special thanks of gratitude to our teacher Dr. Payal Garg who gave us this golden opportunity to do this amazing project on “GAS AGENCY ADMINISTRATION SYSTEM” with C++ language, which also helped us in doing a lot of research and we came to know about so many new things, we are really thankful to them.

Secondly, we would also like to thank our parents and friends who helped us a lot in finalizing this project within the limited time frame.

ABSTRACT

The title of the project is “Gas Agency Administration System”, build in C++ language and is supervised by Mrs. Payal Garg.

This report is conducted in order to set the foundations upon the final project.

This project work is primarily designed to give an insight to computer based Gas Agency Administration System.

CONTENTS

OBJECTIVE

- This mini project is an small effort made by us to bring a liquidity in all types of maintaining ledger records regarding the LPG (Liquified Petroleum Gas) usage.
- The proposed project on gas agency administration system is an effort to solve the various problems in gas transaction in liquefied gas agencies. The implementation of the project establishes a systematic and reliable distributing service along with a well-maintained stock administration.
- Gas Agency administration system is designed to handle all the primary information required to calculate such as – final bills, total sales during the entire day.

WHAT REALLY IS A GAS AGENCY?

It is a place just like an ordinary warehouse where cylinders filled with LPG gases are kept for their further supply into the households of various houses.

India is a huge country and so its supply chain should also be strong enough to meet the gas demands in the country.

Gas Agency is a platform which is provided by the various GAS providing companies such as INDANE Gas, Bharat Petroleum, OIL, etc. to its customers in their various cities over the nation so that an ordinary people can book cylinder/LPG Gas from them.

Distributors around the nation purchase the dealership of the particular Gas Providing company so that they can provide their services all over the nation.

WHAT IS THE NEED OF GAS AGENCY ?

Gas Agency is the place where ordinary people come to order a new refill for their domestic LPG . Without Gas Agency in a city zone, the distribution system protocols set by the OIL providing companies will get disturbed as a result of which it can result into the mismanagement of the gas resource of the Government of India. That is the reason why the availability of the Gas Agency in a city is very much necessary in our day to day life.

This will ultimately lead to gas scarcity due to its black marketing.

HOW TO GET A NEW INDANE GAS CONNECTION OFFLINE?

PROBLEM AREAS

- Initial problem is that the customer has to get connected over the phone, it would be harder if the Gas Agency is very popular and busy.
- The chances of committing mistakes at the Gas Agency side in providing a menu list for a specific time would be more.
- There might be some communication problems or sometimes language might be a barrier.
- As entire booking has to be done manually at the Gas Agency end, the chances of occurrence of mistakes is high as well
- Most of Gas Agency have single phone line and a single operator to handle incoming calls, so they can accept limited orders
- If the Gas Agency is of busy type, then the operator is left with no time to decide over the priority of the order fulfilment
- Even assigning orders (or some menu from the order) to a specific cook can be cumbersome if it is done parallel with the bookings of the order
- All the calls will not by intended for booking, as some calls might be for cancelling the order or to fetch the status as well, this eats up the productive time at the Gas Agency side.
- There might be some communication problems or sometimes language might be a barrier.

PROJECT SCOPE

- The central system functionalities of the Gas Agency Administration System comprise generating reports, inventories, employee records, stock management and managing orders.

- The order management involves the creation and deleting of orders, removing and adding LPG from a request, and closing the refill.

- All the orders made should be stored in the system's database and connected to the significant project tasks, with testing and implementation that consume marginally more time than design.

- The primary scope of the Gas Agency Administration System project is well depicted on the user case diagrams that are well showcased.

SYSTEM REQUIREMENTS

- HARDWARE REQUIRED
  1. 4 GB RAM
  2. 10 GB HARD DISK

- SOFTWARE REQUIRED
  1. Windows 7 or Higher
  2. C++ compiler

FUNCTIONAL SPECIFICATIONS

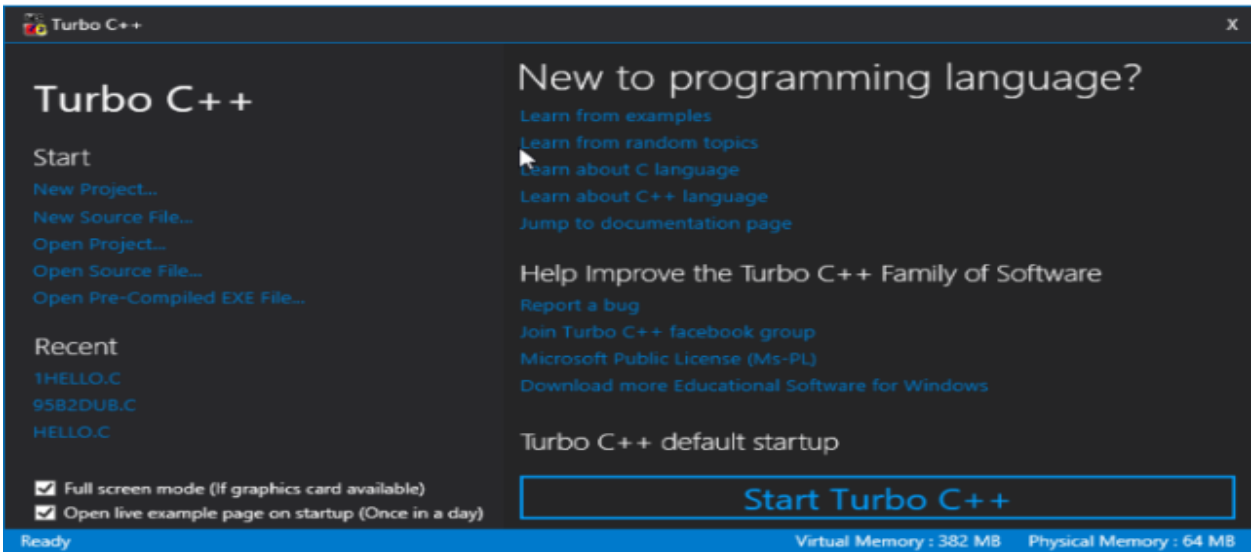
- Customer Specifications:
- Search Gas resource type according to the time of order delivery
- Allow to search menu according to price and category
- Allow to book/cancel order

MANAGEMENT SPECIFICATIONS

- Edit Menu records:
- Cancellation of the order:
- Get information about total sales

Turbo C++

Turbo C++ is a C++ IDE which is used by the programmers to compile the .cpp code file into .exe executable file.



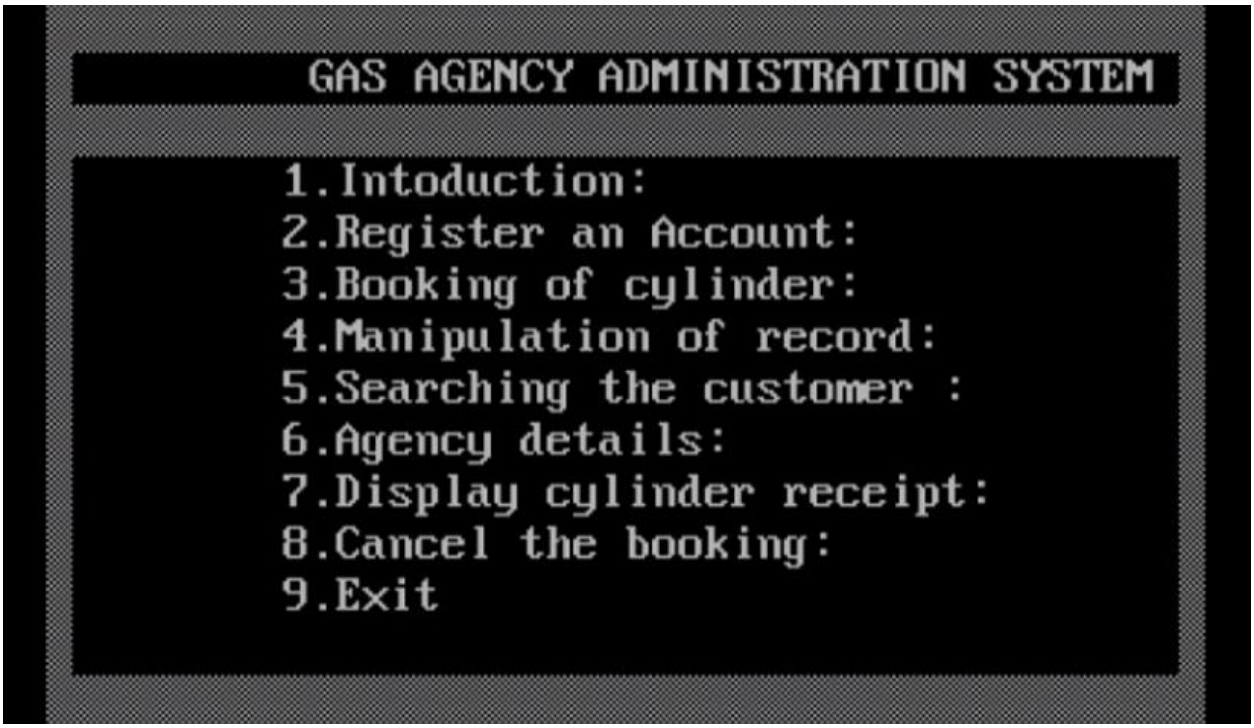
[Precaution]: This Mini Project will only run on Turbo C++.

Please run this .cpp file on Turbo C++ Code Editor to view the project .

If you try to view this code file on any other Code Editor then it will show some errors due to missing of some dll files.

First Interface of the Project

This is how dashboard of the Gas Agency will look like



Registration Of Account

Adding the new customer into the GAS AGENCY Database

```
 Enter the resgistration number:1
Booking Number  is
 -24126
Of consumer

                Registration number: 1
                Consumer Name       : tony
                Phone number is     :9988001190
                Address is       :   sector62 noida
                Aadhar number is    : 000099991111
```

Searching the Customer

Officer at the GAS Agency will search the customer into its database by entering the following details

```
1.INDIVIDUALLY
2.Whole
```

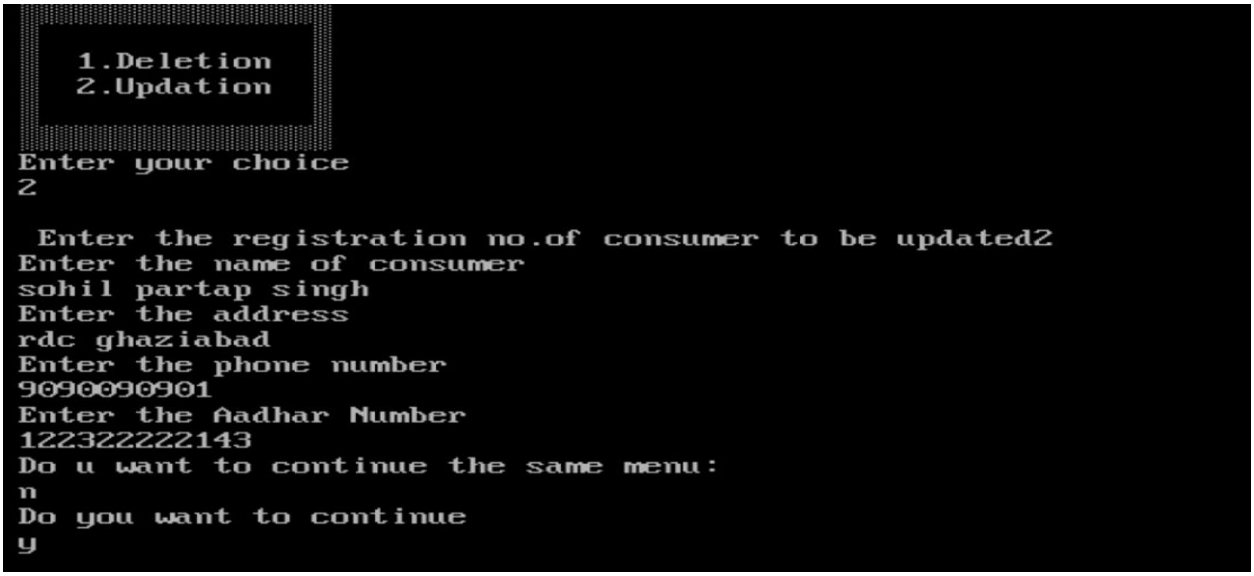
Searching the Customer

```
1.INDIVIDUALLY
2.Whole
Please enter your choice
1
Enter the registrartion number of consumer
1

                Registration number: 1
                Consumer Name       : tony
                Phone number is     :9988001190
                Address is       :   sector62 noida
                Aadhar number is    : 000099991111
```

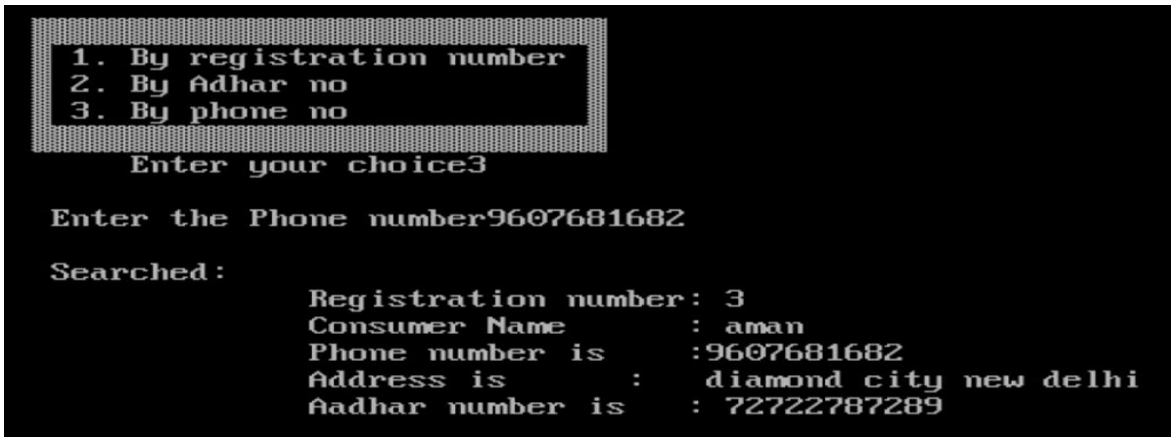
Manipulation Of Record

In this section, we are concerned about the updation & deletion of the existing customer from the database of the GAS AGENCY database system.



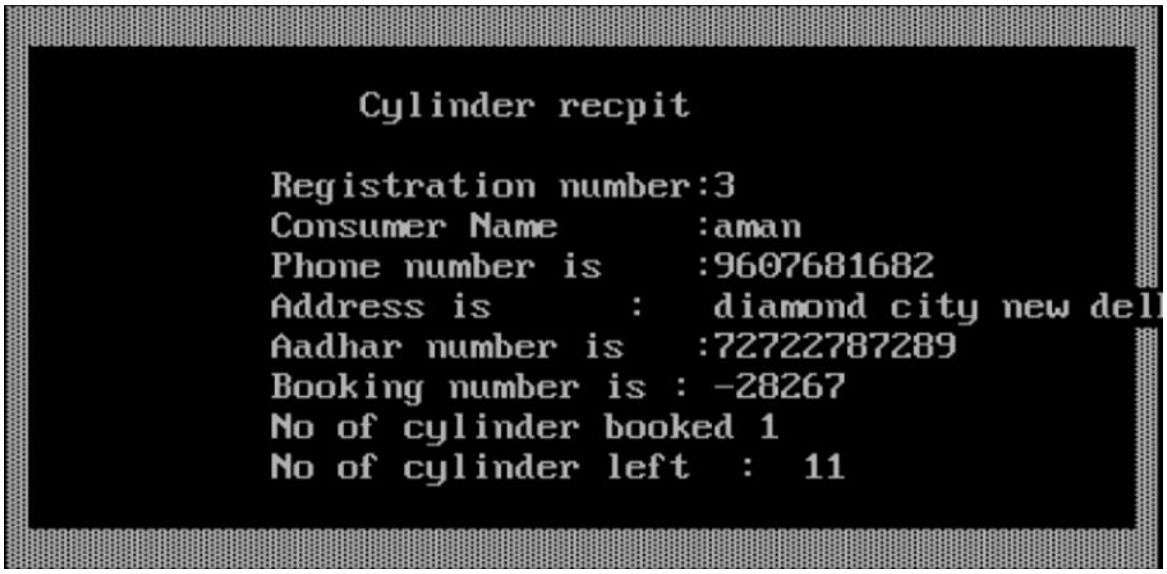
Booking The Cylinder

Here , 3 options have been given to the customer to facilitate him/her on how he/she choose to book the cylinder.



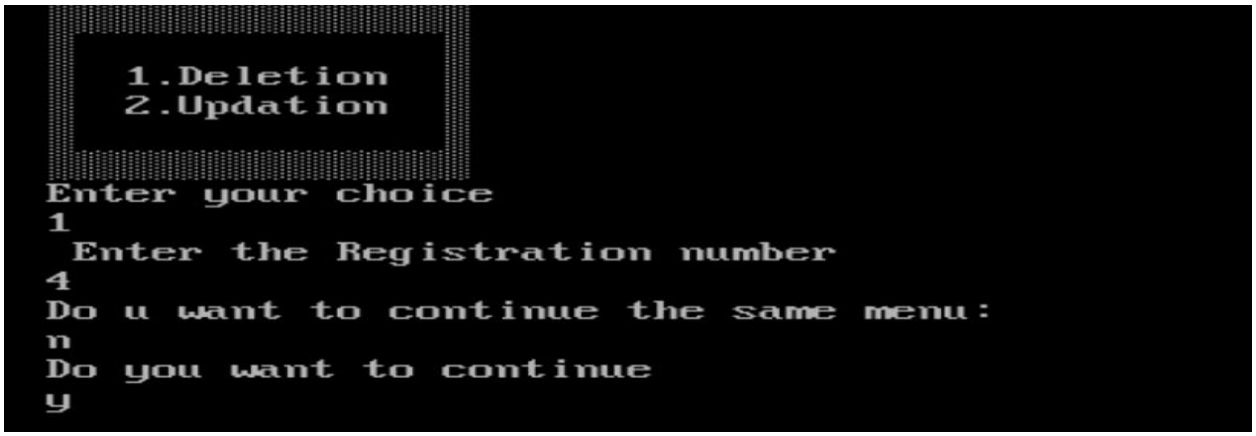
Generation of the Cylinder Receipt

After completing all the formalities of the GAS Agency, the system will generate the receipt of the ordered new refill LPG.



Deletion/Cancellation

Cancelling the order is preferred when the customer does not want



SOURCE CODE

Gas Agency Administration System

```
/*                                                    GAS AGENCY ADMINISTRATION
SYSTEM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                          2000270110021


                          Nishchal Arya

                          2000270130114                 */
#include<fstream.h>
#include<conio.h>
#include<string.h>
#include<process.h>
#include<stdio.h>
#include<dos.h>
int e=0;
struct booking
{
int rno;
int bookno;
char adhar[12];
}o;
class gas
{
int regno;
char  name[20],address[25], phone[11],aadhar[12];
public:
void intro();
void enter();
void book();
void mani();
void searching();
void details();
void print();
```

```
void display(int);
void display(float);  //searched
void display();      //indi and whole
int getregno()
{
return regno;
}
char* getaadhar()
{
return aadhar;
}
char* getphone()
{
return phone;
}
}g;
struct aa
{
int f,a;
}s;
void gas::display(float m)
{


ifstream ifs("gas.txt");

       while(ifs.read((char*)&g,sizeof(g)))
       {
       if(getregno()==m)
       {
       cout<<"\n              Registration number: "<<regno;
       cout<<"\n              Consumer Name      : ";

       puts(name);
       cout<<"              Phone number is    :";

       puts(phone);
       cout<<"              Address is      :   ";

           puts(address);
       cout<<"              Aadhar number is   : ";

           puts(aadhar);
       }
       }
```

```
ifs.close();
}
           void turnover()
         {
         int t=0;
         ifstream ifs;
         ifs.open("bookno.txt");
        while(ifs.read((char*)&o,sizeof(o)))
        t=t+1;
        cout<<"������������������������������������\n";
        cout<<"�                                  \n";
        cout<<"�Cost of 1 cylinder: 700           \n";
        cout<<"�Total cylinder booked:            \n";
        gotoxy(25,4);
        cout<<t<<endl;
        cout<<"�Turnover of Agency:               \n";
        gotoxy(22,5);
        cout<<700*t<<endl;
        cout<<"                                   \n";
        cout<<"                                   \n";
        cout<<"������������������������������������\n";
        ifs.close();
        }
void gas::display()
{
int w;
float q;
char a;
do
{
clrscr();
cout<<"\n ������������������ ";
cout<<"\n                  ";
cout<<"\n  1.INDIVIDUALLY  ";
cout<<"\n  2.Whole         ";
cout<<"\n                  ";
cout<<"\n ������������������ ";
cout<<"\nPlease enter your choice\n";
cin>>w;
switch(w)
 {

case 1:   cout<<"Enter the registrartion number of consumer\n";
      cin>>q;
      display(q);
```

```
      break;
case 2:     ifstream ifs("gas.txt");

         while(ifs.read((char*)&g,sizeof(g)))
        {
           cout<<"\nRegistration number:"<<regno;
           cout<<"\nConsumer Name   :";
           puts(name);
           cout<<"Phone number is   : ";
           puts(phone);
        cout<<"Address is   :";
           puts(address);
           cout<<"Aadhar number is  :";
           puts(aadhar);
          }        ifs.close();
          break;
default :   cout<<"Please choose from the option\n";
 }
 cout<<"Do you want to continue to same menu(y/n)\n";
 cin>>a;

 }
 while(a=='y'||a=='Y');

}
void gas::display(int r)
{

ifstream ifs("gas.txt");

       while(ifs.read((char*)&g,sizeof(g)))
       {
       if(getregno()==r)
       {
       cout<<"  ?           Registration
number:"<<regno<<"                ?";
       cout<<"\n  ?          Consumer Name      :                  ?";
       gotoxy(35,6);
       puts(name);
       cout<<"  ?           Phone number is    :                  ? ";
       gotoxy(35,7);
       puts(phone);
       cout<<"  ?           Address is      :                     ? ";
       gotoxy(35,8);
           puts(address);
```

```
       cout<<"  ?           Aadhar number is    :                  ?  ";
       gotoxy(35,9);
           puts(aadhar);
       }
       }
ifs.close();
}

int generate();
int generate()
 {
 ifstream ifs1;
 ifs1.open("abc.txt");
while(ifs1.read((char*)&s,sizeof(s)));
 ifs1.close();
 ifstream ifs;
 ifs.open("pqr.txt");
 ifs>>e;
 ifs.close();
  if(e!=1)
  {
 ifstream ifs;
 ifs.open("gas.txt");
ifs.seekg(0,ios::end);
 ofstream ofs1;
  ofs1.open("abc.txt",ios::binary|ios::app);
  s.f=ifs.tellg();
 s.f=s.f/sizeof(g);
 s.f=s.f+1;
 s.a=s.f;
 ifs.seekg(0,ios::beg);
  ifs.close();
   ofs1.write((char*)&s,sizeof(s));
  ofs1.close();
 return(s.f);
   }
 else
 {  ifstream ifs;
 ifs.open("gas.txt");
   ifs.seekg(0,ios::end);
    int f=ifs.tellg();
      ifs.seekg(0,ios::beg);
      ifstream ifs1("abc.txt");//another file store regno
      ifstream ifile("pqr.txt");
      ifile>>e;
```

```
      ifile.close();
    int w,q;

  while(ifs1.read((char*)&s,sizeof(s)))
 { w=0;
   for(int i=0;i<=(f+e);i++)
     {
  ifs.read((char*)&g,sizeof(g));
     if(s.a==g.getregno())
    { w++;
     break;
     }
     }
     if(w==0)
     {
     q=s.a;
     break;
     }
}
ifs.close();
ifs1.close();
  if(w==0)
  {
 e--;
 ofstream ofs("pqr.txt");
 ofs<<e;
 ofs.close();
     return q;
      }
 }
 }

void gas::intro()
{ clrscr();
cout<<"       ������������������������������������������������
������������������ \n";
cout<<"       ��                                                ��  \n";
cout<<"       ��          WELCOME TO GAS-AGENCY PROGRAME        ��  \n";
cout<<"       ��                                                ��  \n";
cout<<"       ��                                                ��  \n";
cout<<"       ��                                                ��  \n";
cout<<"       ��                                                ��  \n";
cout<<"       ��                                                ��  \n";
cout<<"       ��                                                ��  \n";
cout<<"       ��                                                ��  \n";
```

```
cout<<"       ??                                                    ?? \n";
cout<<"       ??                                                    ?? \n";
cout<<"       ??                                                    ?? \n";
cout<<"       ??                                                    ?? \n";
cout<<"       ??                                                    ?? \n";
cout<<"       ??                                                    ?? \n";
cout<<"       ??                                                    ?? \n";
cout<<"       ??                                                    ?? \n";
cout<<"       ??                                                    ?? \n";
cout<<"       ????????????????????????????????????????????????????
???????????????????? \n";

}
void gas::enter()
{  clrscr();
regno=generate();
cout<<"Enter the name of consumer"<<endl;
gets(name);
cout<<"Enter the address"<<endl;
gets(address);
cout<<"Enter the phone number"<<endl;
gets(phone);
cout<<"Enter the Aadhar Number"<<endl;
gets(aadhar);
}
void gas::book()
{ clrscr();
int q=0;
float Regno;
char m;
ifstream ifs;
ifstream ifile("bookno.txt");
while(ifile.read((char*)&o,sizeof(o)));
ofstream ofile("bookno.txt",ios::binary|ios::app);
ifs.open("gas.txt");
cout<<"\n Enter the resgistration number:";
cin>>Regno;
while(ifs.read((char*)&g,sizeof(g)))
{
if(g.getregno()==Regno)
{
o.rno=Regno;
o.bookno=o.bookno+4141;
strcpy(o.adhar,g.aadhar);
cout<<"Booking Number  is   \n ";
```

```
cout<<o.bookno;
ofile.write((char*)&o,sizeof(o));
cout<<"\nOf consumer\n";
display(Regno);
ofile.close();
q=1;
}
}
if(q==0)
cout<<"Sorry  no such consumer is found"<<endl;
ifs.close();
} //over
    void cancel()
     {

       ifstream ifs;
    ofstream ofs;

    int del,f=0;
    ifs.open("bookno.txt");
    ofs.open("newbookno.txt",ios::binary|ios::app);
    cout<<" Enter the booking number "<<endl;
    cin>>del;
    while(ifs.read((char*)&o,sizeof(o)))
    {
    if(o.bookno!=del)
    {
    f=1;
    ofs.write((char*)&o,sizeof(o));
    }
    }
    if(f==0)
    cout<<"Booking number does not exist\n";
    ifs.close();
     ofs.close();
    remove("bookno.txt");
    rename("newbookno.txt","bookno.txt");
    }
void gas::mani()
{
char a;
int w,del;
cout<<"Manipulation of Record"<<endl;
do
{ clrscr();
```

```
cout<<"������������������\n";
cout<<"�              \n";
cout<<"�  1.Deletion  "<<endl;
cout<<"�  2.Updation  "<<endl;
cout<<"�              \n";
cout<<"������������������ \n";
cout<<"Enter your choice"<<endl;
cin>>w;
switch(w)
{

case 1: ifstream ifs;
    ofstream ofs;
    ifs.open("gas.txt");
    ofs.open("newgas.txt",ios::binary|ios::app);
    cout<<" Enter the Registration number "<<endl;
    cin>>del;
    while(ifs.read((char*)&g,sizeof(g)))
    {
    if(getregno()!=del)
    ofs.write((char*)&g,sizeof(g));
    }
    ifs.close();
     ofs.close();
    remove("gas.txt");
    rename("newgas.txt","gas.txt");


       e++;
       ofs.open("pqr.txt");
       ofs<<e;
       ofs.close();

       break;

case 2:int w,q;
    cout<<"\n Enter the registration no.of consumer to be updated";
    cin>>w;
    fstream fs;
    fs.open("gas.txt",ios::in|ios::out|ios::binary);
    while(!fs.eof())
    {
     q=fs.tellg();
     if(fs.eof())
     break;
```

```
     fs.read((char*)&g,sizeof(g));
     if(g.getregno()==w)
     {
      fs.seekg(q);
      cout<<"Enter the name of consumer"<<endl;
      gets(name);
      cout<<"Enter the address"<<endl;
      gets(address);
      cout<<"Enter the phone number"<<endl;
      gets(phone);
      cout<<"Enter the Aadhar Number"<<endl;
      gets(aadhar);
      fs.write((char*)&g,sizeof(g));
      }
      }
      fs.close();
    break;
default: cout<<"Invalid input"<<endl;
}
cout<<"Do u want to continue the same menu:\n";
cin>>a;
}while(a=='y'||a=='Y');
}
void gas::searching()
{
int q,f;
char b;
ifstream ifs;
cout<<"\n....SEARCHING OF RECORD";
do
{
f=0;
clrscr();
cout<<"\n";
cout<<"\n 1. By registration number "; //dis(float)
cout<<"\n 2. By Adhar no            ";
cout<<"\n 3. By phone no            ";
cout<<"\n";
cout<<"\n     Enter your choice";
cin>>q;
switch(q)
{
case 1:float u;

       ifs.open("gas.txt");
```

```
       cout<<"\n Enter the Registration number";
       cin>>u;
       while( ifs.read((char*)&g,sizeof(g)))
       {
       if(getregno()==u)
      { cout<<"\n Searched:";
       f=1;
       display(u);
    }
      }
      ifs.close();
      if(f==0)
      cout<<"\n Not found";

      break;
case 2:     char s[12];
       float b;

       ifs.open("gas.txt");
       cout<<"\n Enter the Aadhar number";
       gets(s);
       while( ifs.read((char*)&g,sizeof(g)))
       {
       if(strcmpi(getaadhar(),s)==0)
      { cout<<"\n Searched:";
       f=1;
       b=regno;
       display(b); }
      }
      ifs.close();
      if(f==0)
      cout<<"\n Not found";

      break;

case 3:     char k[11];
         float n;
       ifs.open("gas.txt");
       cout<<"\n Enter the Phone number";
       gets(k);
       while( ifs.read((char*)&g,sizeof(g)))
       {

       if(strcmpi(getphone(),k)==0)
      { cout<<"\n Searched:";
```

```
       f=1;
       n=regno;
       display(n); }
      } ifs.close();
      if(f==0)
      cout<<"\n Not found";
      break;

default: cout<<"Invalid input"<<endl;
cout<<"Do u want to continue the same menu:\n";
cin>>b;
}
}
while(b=='y'||b=='Y');

}



void main()
{
clrscr();
int f;
char c;
do
{ clrscr();

cout<<"                  ������������������������������������
������������\n";
cout<<"                  �         GAS AGENCY ADMINISTRATION SYSTEM  \n";
cout<<"                  ������������������������������������
������������\n";
cout<<"                  \t1.Intoduction:                    \n";
cout<<"                  \t2.Register an Account:            \n";
cout<<"                  \t3.Booking of cylinder:            \n";
cout<<"                  \t4.Manipulation of record:         \n";
cout<<"                  \t5.Searching the customer :        \n";
cout<<"                  \t6.Agency details:                 \n";
cout<<"                  \t7.Display cylinder receipt:       \n";
cout<<"                  \t8.Cancel the booking:             \n";
cout<<"                  \t9.Exit                            \n";
cout<<"                  \t                                  \n";
cout<<"                  ������������������������������������
������������\n";
cout<<"\n";
```

```
cout<<"Please Enter Your Choice:\n";
cin>>f;

switch(f)
{
case 1:
       g.intro();
       getch();
       break;
case 2: ofstream ofs("gas.txt",ios::binary|ios::app);
    g.enter();
    ofs.write((char*)&g,sizeof(g));
     getch();
       break;

case 3: g.book();
    getch();
       break;
case 4:g.mani();
       getch();
       break;
case 5:g.searching();
       getch();
       break;
case 6: clrscr();
    int k,p=0;
    cout<<"������������������������������������������������
����\n";
    cout<<"�        1.Details of stock              �\n";
    cout<<"�        2.Total Salary                  �\n";
    cout<<"�        3.Display the consumer details  �\n";
    cout<<"������������������������������������������������
����\n";
    cout<<"Please enter your choice\n";
    cin>>k;
    switch(k)
    {
    case 1:  clrscr();
        ifstream ifs("bookno.txt");
        while(ifs.read((char*)&o,sizeof(o)))
        p=p+1;
        cout<<" Cylinder Delivered  "<<"      Stock left      \n";
        gotoxy(11,2);
        cout<<p;
        gotoxy(30,2);
```

```
         cout<<(100-p);
         cout<<endl;
         getch();
         break;
    case 2:  clrscr();
         turnover();
        break;
       case 3:       g.display();
            getch();
             break;
       default: cout<<"Invalid input\n";
           }
           break;



case 7:        clrscr();
        int x,f=0,q=0,m,n=0;
        char a[12];
           cout<<"Enter the registration number\n";
        cin>>x;
        cout<<"Enter the aadhar number\n";
        gets(a);
        ifstream ifs;
        ifs.open("gas.txt");

        ifstream ifile("bookno.txt");

        while(ifs.read((char*)&g,sizeof(g)))
        {
        if(g.getregno()==x)
        n=1;

        }
        if(n==1)
        {
        while(ifile.read((char*)&o,sizeof(o)))
        {
        if(o.rno==x&&strcmpi(o.adhar,a)==0)
        {
        clrscr();
        q=q+1;
        cout<<"  ????????????????????????????????????????????????????\n";
        cout<<"  ?                                                  ?\n";
```

```
        cout<<"  ?               Cylinder recpit                    ?\n";
        cout<<"  ?                                                  ?\n";
             g.display(x);
        cout<<"  ?           Booking number is :                    ?\n";
        gotoxy(35,10);
        cout<<o.bookno;
        cout<<"\n  ?           No of cylinder booked :                ?\n";
         gotoxy(37,11);
        cout<<q;
        cout<<"\n  ?           No of cylinder left  :                 ?\n";
        m=12-q;
        gotoxy(39,12);
        cout<<m;
        cout<<"\n  ?                                                  ?\n";
        cout<<"  ??????????????????????????????????????????????????
??????????????????\n";
        f=1;
         }
        }
        } ifs.close();
        ifile.close();

        if(n==0)
        {   f=1;
        cout<<"Register the consumer first\n";
        }
        if(f==0)
        {
        cout<<"Cylinder is not booked\n";
        cout<<"Go and book the cylinder\n";
        }
        getch();
        break;


case 8:         cancel();
        break;
case 9:         exit(0);



default :  cout<<"Invalid Input\n";

}
```

```
cout<<"Do you want to continue  \n";
cin>>c;
}
while(c=='y'||c=='Y');
}
```

SOLUTIONS

- This Gas Agency system is fully secured and can be easily manipulated under Admin's request.
- Customers will have choices of what to order in what amount irrespective of the monthly usage restrictions.
- Easy to use and user friendly software.
- It takes very few time to place an order of filling a new LPG refill.
- Stock Administration can be easily monitored via this Gas Agency Administration System.
- If a user wants to cancel the refill order then he/she can do so by going under the Deletion/Cancellation tab provided in this system.

CONCLUSION

- Gas Agency management database is an approach to effectively manage the data of a Gas Agency.

- A good database can be easily understood and the relationships between various customers and the management team can be easily depicted.

- The proposed Gas Agency Administration System is time saving and error free as compared to the traditional systems. This system attracts customers and also adds the efficiency of maintaining the Gas Agencies ordering and billing.