1 Code in C language:

```
#include < stdio.h>
   void Customername(){
3
            //This function ask the customer to enter their name
            printf("welcome to LPG gas agency\n");
            char Customername [50];
            //arrray is used here to take character input of name
7
            printf(" please enter your the name \n");
            gets(Customername);
9
            printf("Name of respected customer is :\n");
            puts(Customername);
           printf("\n");
11
   }
   void registerednum(){
13
          printf("Please enter your registered number\n");
15
           //this function takes the input of phone number of customer
          long long int registerednum;
          scanf("%11d",&registerednum);
17
          printf("your registered phone number is :\n");
19
          printf("%11d\n",registerednum);
          printf("\n");
21
   }
   void modeofpayment(){
23
            printf("please select your mode of payment\n");
            //select the mode of paymment, press 1 for online and 2 for offline paymnet
            printf("press 1 for online payment\n");
            printf("press 2 for offline payment\n");
27
            int modeofpayment
            scanf("%d", &modeofpayment);
29
            getchar();
            printf("preferable mode of payment is :\n");
31
            //conditional statements are used here
            if (modeofpayment == 1) {
            printf("you are processiding towards online payment\n");
33
35
            else if (modeofpayment == 2) {
            printf("you are processiding towards ofline payment\n");
37
            else{
            printf("enter the correct number by reading above instruction carefully\n");
39
            printf("\n");
41
43
   void employeeinfo(){
            //This function is to shows the name and number of employee of LPG agency
45
            char empname[50];
            printf("name of employee of LPG gas agency\n");
47
            gets(empname);
            puts(empname);
49
            long long int mobileno;
            printf("Give the mobile number of the employee\n");
```

```
51
            scanf("%11d",&mobileno);
            getchar();
            printf("Mobile number of your employee is %lld\n",mobileno);
53
            printf("\n");
55
    void addressofcustomer(){
            //This function takes input of address of customer
            char location[100];
59
            int streetno;
       // char is used to take character input name and int for integer value of street number
61
            printf("please confirm your registered address by entering your address\n");
            gets(location);
            printf("your current address is \n");
63
            puts(location);
65
            printf("Street number of customer\n");
            scanf("%d",&streetno);
            printf("%d",streetno);
67
            getchar();
69
            printf("\n");
    }
71
    void cylinderlimit(){
            //This function take the input of number of cylinders customer buyed before booking
            printf("Enter the number of cylinders you ordered in the current year\n");
73
            int cylinderno;
            scanf("%d",&cylinderno);
75
            getchar();
            if (cylinderno <15) {</pre>
            //Customer can't have more than 15 cylinders in a year
79
            printf("you can go with procedure to get cylinder\n");
            }
81
            else{
            printf("sorry, your limit is fullfilled of getting cylinder for this year\n");
83
            printf("\n");
85 }
    void verifyDAC(){
               //This function is verify the delivary authentication code
           int DACsend;
89
           int DACreceive;
           printf("DAC sended to the registered phone number:\n");
91
           scanf("%d",&DACsend);
           printf("share DAC %d on delivery\n", DACsend);
           scanf("%d",&DACreceive);
93
           printf("My delivary authentication code is %d:\n",DACreceive);
95
           int T;
           while(T>0){
              //while loop is used to take take repeatly input till the DAC is correctly verifi
           if (DACsend == DACreceive) {
           printf("The entire process till the cylinder comes home ends\n");
99
           break;
101 }
           else{
```

```
printf("please check your message again and verify the correct DAC
103
    received on registered number \n");
           scanf("%d",&DACreceive);
105
107
    }
            printf("\n");
    }
109
    void Rating(){
             printf("Dear customer,");
111
             printf("please spare a few seconds to provide your feedback which will help us to s
113
             //Please select appropriate response for the service
             printf(" If Cylinder is checked for leakage enter 'y'\n");
115
             char response;
             scanf("%s",&response);
             if (response == 'y'){
117
             printf("Thank you for checking\n");
119
             else{
121
             printf("please contact on our service number and repair it as soon as possible\n");
123
             printf("please rate the service of LPG gas agency according to our service of 5
125
             int star;
             scanf("%d",&star);
             switch (star){
127
129
                              printf("*\n");
                              printf("Thank you\n");
131
                              break;
                     case 2:
133
                              printf("* *\n");
                              printf("Thank you\n");
135
                              break;
                     case 3:
                              printf("* * *\n");
137
                              printf("Thank you\n");
139
                              break;
                     case 4:
141
                              printf("* * * *\n");
                              printf("Thank you\n");
143
                              break;
                     case 5:
145
                              printf("* * * * *\n");
                              printf("Thank you\n");
147
                              break;
                              printf("\n");
149
             }
    void offlinepay(){
             int costofcylinder=1120;
153
             char dayofdelivary;
```

```
int extracharge;
             printf("Enter character s for weekened days\n");
155
             printf("On which day you want cylinder\n");
157
             scanf("%s",&dayofdelivary);
             if (dayofdelivary == 's'){
159
             printf("charges for weekened days is 50 Rs\n");
                     extracharge=50;
161
             else{
163
             printf("charges of nonweekend days is 20 Rs\n");
                     extracharge=20;
165
             }
            printf("amount of money customer needs to pay ");
167
             int pay=costofcylinder+extracharge;
             printf("%d\n",pay);
169
             int moneypaid;
             scanf("%d",&moneypaid);
171
             int count;
             while(count >0) {
173
             if (moneypaid == pay) {
                     printf("Your payment is successfull, thank you so much\n");
175
             }
             else{
177
             printf("your payment is rejected\n");
             printf("Please pay correct amount\n");
181
             scanf("%d",&moneypaid);
             getchar();
183
             count --;
185
    }
187
             printf("\n");
189
    void bookingbywtsp(){
191
             //customer can book cylinder from wtsp also by typing REFILL.
             //to know the status of the gas booking send STATUS.
             printf("Enter 'REFIL' on number 7588888824 for booking\n");
193
             char Refil[100];
             gets(Refil);
195
             puts(Refil);
197
             printf("your cylinder is booked\n");
             char status[100];
             printf("check status by entering 'STATUS'\n");
199
             gets(status);
201
             printf("Now you can check the status of cylinder booking\n");
                     printf("\n");
203
    }
205 int main() {
```

```
\\calling each function
207  Customername();
    registerednum();
209  cylinderlimit();
    employeeinfo();
211  addressofcustomer();
    bookingbywtsp();
213  verifyDAC();
    modeofpayment();
215  offlinepay();
    Rating();
217  return 0;
}
```

2 Welcome to LPG gas agency:

3 Aim

The Aim of this mini project programme is to provide a successfull gas Cylinder delivary to the registered customer, by using some criteria which works as functions in this programmme. This project contains total ten functions.

4 Following are the functions used in this project

4.1 Customername

This function take the input character name by Customer by using gets and puts library function.

4.2 registerednum

This function take the input of customer's registered number on LPG gas agency as the Cylinder can be booked by registered number only.

4.3 modeofpayment

This function is to select the mode of payment by customer's this is offline or online. customer's have to press 1 for online payment and 2 for offline payment.

4.4 employeeinfo

This function takes input of employee name and employee mobile number and display the respective information.

4.5 addressofcustomer

This function takes input of address of customer for delivary of cylinder. which contain current location and street number of customer's house.

4.6 cylinderlimit

This function basically check wheather you can take cylinder or not , the limit is of having 15 cylinder in a year and you exceeds the limit you can't take cylinder . here we have used if else condition in this function.

4.7 verifyDAC

Delivary authentication code is a four digit which come in form of message in registered phone number and the customers have to verify that code with employee to get cylinder. In this function I had used while loop for repeatly take input of authentication code unless it gets verified.

4.8 Rating

This function rates the delivary of cylinder according to the customer's choice. switch statements are used in this function for rating out of 5.

4.9 offlinepay

This functions takes payment from customer including extra charges according to the day of delivary customer choose. while loop is used in this function to take repeatly payment unless the payment is correct, the customer has three chance for payment.

4.10 bookingbywtsp

This functions helps the Customer to book online Cylinder by texting a single message REFIL on required number Also the customer can check the status of his/her status by texting STATUS.

5 Code In C language:

```
#include<stdio.h>
void Customername()
{
//This function ask the customer to enter their name
printf("welcome to LPG gas agency\n");
char Customername[50];
//arrray is used here to take character input of name printf(" please enter your the name \n");
gets(Customername);
printf("Name of respected customer is :\n");
puts(Customername);
printf("\n");
}

void registerednum()
{
printf("Please enter your registered number\n");
//this function takes the input of phone number of customer
```

```
long long int registerednum;
scanf("printf("your registered phone number is :\n");
printf("\%lld \n",registerednum); printf("\n");
void modeofpayment()
printf("please select your mode of payment\n");
//select the mode of paymment, press 1 for online and 2 for offline paymnet
printf("press 1 for online payment\n");
printf("press 2 for offline payment\n");
int modeofpayment;
\operatorname{scanf}("\%d", \& \operatorname{modeofpayment});
getchar();
printf("preferable mode of payment is:\n"); //conditional statements are used here if(modeofpayment==1)
printf("you are processiding towards online payment\n");
else if(modeofpayment==2)
printf("you are processiding towards ofline payment\n");
else
printf("enter the correct number by reading above instruction carefully\n");
printf("\n");
void employeeinfo()
//This function is to shows the name and number of employee of LPG agency
char empname[50];
printf("name of employee of LPG gas agency\n");
gets(empname);
puts(empname);
long long int mobileno;
printf("Give the mobile number of the employee\n");
scanf("%lld",& mobileno);
getchar();
printf("Mobile number of your employee %lld \n",mobileno);
printf("\"n);
void addressofcustomer()
```

```
//This function takes input of address of customer
char location[100];
int streetno;
// char is used to take character input name and int for integer value of street number
printf("please confirm your registered address by entering your address\");
gets(location);
printf("your current address is\n");
puts(location);
printf("Street number of customer\n");
scanf("street num is\%d \n",\&streetno);
printf("\%d", streetno);
getchar();
printf("\n);
void cylinderlimit()
//This function take the input of number of cylinders customer buyed before booking current cylin-
printf("Enter the number of cylinders you ordered in the current year\n");
int cylinderno;
scanf("\%d",\&cylinderno);
getchar();
if(cylinderno;15)
//Customer can't have more than 15 cylinders in a year printf("you can go with procedure to get
cylinder n";
else{
printf("sorry, your limit is fullfilled of getting cylinder for this year\n");
printf("\n");
void verifyDAC()
//This function is verify the delivary authentication code int DACsend;
int DACreceive;
printf("DAC sended to the registered phone number:\n");
\operatorname{scanf}("\%d",\&\operatorname{DACsend});
printf("share DAC %don delivery\n",DACsend);
\operatorname{scanf}("\%d",\&\operatorname{DACreceive});
printf("My delivary authentication code is %d:\n",DACreceive);
int T;
while(T>0)
```

```
//while loop is used to take take repeatly input till the DAC is correctly verified
if(DACsend==DACreceive)
printf("The entire process till the cylinder comes home ends\n");
break;
else
printf("please check your message again and verify the correct DAC received on registered number\n");
\operatorname{scanf}("\%d",\&\operatorname{DACreceive"});
T--;
printf("\n");
void Rating()
printf("Dear customer,");
printf("please spare a few seconds to provide your feedback which will help us to surve you better\n");
//Please select appropriate response for the service
printf(" If Cylinder is checked for leakage enter 'y'\n");
char response;
printf("otherwise enter any other character"\n");
\operatorname{scanf}("\%d",\&\operatorname{response});
if(response=='y')
printf("Thank you for checking\n");
else
   printf("please contact on our service number and repair it as soon as possible\n");
printf("please rate the service of LPG gas agency according to our service of 5 stars\n");
int star;
\operatorname{scanf}("\%d", \&\operatorname{star});
switch(star)
case 1:
printf("*\n");
printf("Thank you\n");
break;
case 2:
printf("* *\n");
printf("Thank you\n");
break;
```

```
case 3:
printf("* * * \n");
printf("Thank you\n");
break;
case 4:
printf("* * * * \n");
printf("Thank you\n");
break;
case 5:
printf("* * * * * *\n");
printf("Thank you\n");
break;
printf("\n");
}
void offlinepay()
int costofcylinder=1120;
char dayofdelivary;
int extracharge;
printf("Enter character s for weekened days");
printf("On which day you want cylinder\n");
\operatorname{scanf}("\%s",\&\operatorname{dayofdelivary});
if(dayofdelivary=='s')
printf("charges for weekened days is 50 Rs\n");
extracharge=50;
else
printf("charges of nonweekend days is 20 Rs\n");
extracharge=20;
}
printf("amount of money customer needs to pay ");
int pay=costofcylinder+extracharge;
\operatorname{printf}("\%d \ \ ",pay);
int moneypaid;
scanf("%d",\&moneypaid);
int count;
while(count;0) {
if(moneypaid==pay)
printf("Your payment is successfull, thank you so much\n");
break;
else
```

```
{ printf("your payment is rejected\n");
printf("Please pay correct amount\n");
\operatorname{scanf}("\%d",\&\operatorname{moneypaid});
getchar();
count --;
printf("\n");
void bookingbywtsp()
//customer can book cylinder from wtsp also by typing REFILL.
//to know the status of the gas booking send STATUS.
printf("Enter 'REFIL' on number 7588888824 for booking\n");
char Refil[100];
gets(Refil);
puts(Refil);
printf("your cylinder is booked\n");
char status[100];
printf("check status by entering 'STATUS'\n");
gets(status);
printf("Now you can check the status of cylinder booking\n");
printf("\n");
   int main()
calling each function
Customername();
registerednum();
cylinderlimit();
employeeinfo();
addressofcustomer();
bookingbywtsp();
verifyDAC();
modeofpayment();
offlinepay();
Rating();
return 0;
```

6 Output:

welcome to LPG gas agency please enter your the name Sujata More Name of respected customer is: Sujata More

Please enter your registered number 6261315950 your registered phone number is : 6261315950

Enter the number of cylinders you ordered in the current year 7 you can go with procedure to get cylinder

name of employee of LPG gas agency Suresh Mahajan Suresh Mahajan Give the mobile number of the employee 667767890 Mobile number of your employee is 667767890

please confirm your registered address by entering your address sarojini naidu nagar your current address is sarojini naidu nagar Street number of customer 5 5 5 Enter 'REFIL' on number 7588888824 for booking

REFIL REFIL

your cylinder is booked check status by entering 'STATUS'

STATUS

Now you can check the status of cylinder booking

DAC sended to the registered phone number:

4444

share DAC 4444 on delivery

5555

My delivary authentication code is 5555:

please check your message again and verify the correct DAC received on registered number

4444

The entire process till the cylinder comes home ends

```
please select your mode of payment
press 1 for online payment
press 2 for offline payment
preferable mode of payment is:
you are processiding towards online payment
Enter character s for weekened days
On which day you want cylinder
charges for weekened days is 50 \text{ Rs}
amount of money customer needs to pay 1170
your payment is rejected
Please pay correct amount
Your payment is successfull, thank you so much
Dear customer, please spare a few seconds to provide your feedback which will help us to surve
you better
If Cylinder is checked for leakage enter 'y'
Otherwise enter anyother charactyery
Thank you for checking
please rate the service of LPG gas agency according to our service of 5 stars
5
Thank you
```

7 Code in python:

```
def Customername():
    print("Welcome to LPG gas agency")
    Customername = input("Enter your name: ")
    print("Name of respected customer is: " + Customername)

def registerednum():
    registerednum = input("Please enter your registered number: ")
    print("Your registered Phone number is: " + registerednum)
```

```
def modeofpayment():
    print("Please select your mode of payment")
   modeofpayment = input ("Press 1 for online payment OR Press 2 for offline payment")
    if modeofpayment == 1:
        print("You are proceeding towards online payment")
    elif modeofpayment == 2:
        print("You are proceeding towards offline payment")
        print ("Enter the correct number by reading above instruction carefully)")
def employeeinfo():
   empname = input ("Enter name of employee of LPG gas agency")
    print (empname)
    mobileno = input ("Give the mobile number of the employee")
    print("Mobile no of your employee is: " + mobileno)
def addressofcustomer():
    location = input("Please confirm your registered address")
    print("Your current address is: " + location)
    streetno = input("Street number of customer: ")
    print("Your Street number is: " + streetno)
def cylinderlimit():
    cylinderno = int(input("Enter the number of cylinder you ordered in the current ye
    if cylinderno < 15:
        print ("You can go with procedure to get cylinder")
    else:
        print ("Sorry, your limit is fullfilled of getting cylinder for this year")
def verifyDAC():
   DACsend = input ("DAC sended to the registerd phone number: ")
    print("Share DAC" + DACsend + " on delivery")
   DACreceive = input()
    print ("My delivery authentication code is " + DACreceive)
   t = 10000
    while t > 0:
        if DACsend = DACreceive:
            print ("The entire process till the cylinder comes home ends")
            DACreceive = input ("Please check your message again and verify the correct
        t = t - 1
```

```
def Rating():
    print("Dear Customer")
    print ("Please spare a few seconds to provide your feedback which will help us to s
    response = input ("If cylinder is checked for leakage enter Y/N")
    if response == 'Y':
        print ("Thank you for checking \n")
    else:
        print ("Please contact on our service number and repair it as soon as possible"
    star = input ("please rate the service of LPG gas agency according to our service of
    if star == 1:
        print("*")
        print ("Thank You")
    elif star == 2:
        print("* *")
        print ("Thank You")
    elif star == 3:
        print("* * * ")
        print("Thank You")
    elif star = 4:
        print("* * * * ")
        print("Thank You")
    else:
        print("* * * * *")
        print ("Thank You")
def offlinepay():
    dayofdelivery = input ("Enter character s for weekend days, else anything else")
    costofcylinder = 1120
    if dayofdelivery == 's':
        print ("charges for weekend days is 50 Rs")
        extracharge = 50
    else:
        print ("Charges of nonweekend days is 20 Rs")
        extracharge = 20
        print ("Amount of money customer needs to pay")
    pay = costofcylinder + extracharge
    print (pay)
    moneypaid = int(input())
    count = 100
    while count > 0:
        if moneypaid == pay:
            print ("Your payment is successfull, thank you so much")
            break
        else:
            print("Your payment is rejected")
```

```
moneypaid = input("Please pay correct amount: ")
    count = count - 1
def bookingbywtsp():
    Refil = input ("Enter 'REFIL' on number 9407476045")
    status = input("Check status by entereing 'STATUS'")
    print ("Now you can check the status of cylinder booking")
Customername()
registerednum()
cylinderlimit()
employeeinfo()
addressofcustomer()
bookingbywtsp()
verifyDAC()
modeofpayment()
offlinepay()
Rating()
8
    Output:
```

Welcome to LPG gas agency Enter your name: Sujata more Name of respected customer is: Sujata more Please enter your registered number: 323245679Your registered Phone number is: 323245679 Enter the number of cylinder you ordered in the current year: You can go with procedure to get cylinder Enter name of employee of LPG gas agency suresh suresh Give the mobile number of the employee 6578905656 Mobile no of your employee is: 6578905656 Please confirm your registered address Indira Nagar Your current address is: Indira Nagar Street number of customer: Your Street number is: 7 Enter 'REFIL' on number 9407476045 REFIL

```
Check status by entereing 'STATUS'
STATUS
Now you can check the status of cylinder booking
DAC sended to the registerd phone number:
4444
Share DAC 4444 on delivery
6767
My delivery authentication code is 6767
Please check your message again and verify the correct DAC received on registerd number
The entire process till the cylinder comes home ends
Please select your mode of payment
Press 1 for online payment OR Press 2 for offline payment
Enter the correct number by reading above instruction carefully)
Enter character s for weekend days, else anything else
charges for weekend days is 50 Rs
1170
1170
Your payment is successfull, thank you so much
Dear Customer
Please spare a few seconds to provide your feedback which will help us to serve you better)
If cylinder is checked for leakage enter Y/N
Thank you for checking
   please rate the service of LPG gas agency according to our service of 5 stars
5
* * * * *
Thank You
```

9 Profiling:

10 Debuggingg:

```
Flat profile:
Each sample counts as 0.01 seconds. no time accumulated
                                                     self total
calls Ts/call Ts/call name
1 0.00 0.00 Customername
1 0.00 0.00 Rating
         cumulative
                                     self
  time seconds
0.00 0.00
0.00 0.00
                                  seconds
0.00
0.00
                                                                                                      Rating
addressofcustomer
bookingbywtsp
cylinderlimit
employeeinfo
modeofpayment
offlinepay
registerednum
verifyDAC
    0.00
                       0.00
                                         0.00
                                                                           0.00
                                                                                             0.00
                                                                           0.00
0.00
0.00
0.00
0.00
                       0.00
0.00
0.00
0.00
                                                                                            0.00
0.00
0.00
0.00
    0.00
                                         0.00
    0.00
0.00
0.00
                                         0.00
    0.00
                       0.00
                                        0.00
                                                                                             0.00
                       0.00
                                                                                             0.00
                                                                           0.00
                                                                           0.00
                     the percentage of the total running time of the program used by this function. % \left( \frac{1}{2}\right) =\frac{1}{2}\left( \frac{1}{2}\right) ^{2}
time
cumulative a running sum of the number of seconds accounted seconds for by this function and those listed above it.
                     the number of seconds accounted for by this function alone. This is the major sort for this
  self
seconds
                     listing.
calls
                     the number of times this function was invoked, if this function is profiled, else blank.  \\
                     the average number of milliseconds spent in this function per call, if this function is profiled, else blank.
self
ms/call
                     the average number or milliseconds spent in this function and its descendents per call, if this function is profiled, else blank.
total
ms/call
                     the name of the function. This is the minor sort
for this listing. The index shows the location of
the function in the gprof listing. If the index is
in parenthesis it shows where it would appear in
the gprof listing if it were to be printed.
name
Copyright (C) 2012-2020 Free Software Foundation, Inc.
Copying and distribution of this file, with or without modification, are permitted in any medium without royalty provided the copyright notice and this notice are preserved.
                                       Call graph (explanation follows)
granularity: each sample hit covers 2 byte(s) no time propagated
                              self children called
index % time
                                                                               main [16]
Customername [1]
                                                                1/1
                                           0.00
                              0.00
                                                                                    main [16]
Rating [2]
                                                                   1/1
                                          0.00
[2]
                0.0
                              0.00
                                                                           main [16]
addressofcustomer [3]
                                                                   1/1
[3]
                0.0
                                                                                  main [16]
bookingbywtsp [4]
                                                                   1/1
[4]
                0.0
                              0.00
                                             0.00
                                                                        r main [16]
cylinderlimit [5]
                                                                 1/1
[5]
                 0.0
                               0.00
                                              0.00
                                                                              main [16]
employeeinfo [6]
                                                                    1/1
[6]
                                                                   1/1
                                                                                      main [16]
modeofpayment [7]
                               0.00
                                               0.00
[7]
                 0.0
                               0.00
                                              0.00
                                                                                       main [16]
offlinepay [8]
                                                                    1/1
[8]
                 0.0
                               0.00
                                              0.00
                                                                   1/1
                                                                                      main [16]
registerednum [9]
                               0.00
[9]
                 0.0
                                              0.00
                                                                        1 main [16]
verifyDAC [10]
                                                                   1/1
                               0.00
[10]
                0.0
                               0.00
  This table describes the call tree of the program, and was sorted by the total amount of time spent in each function and its children.
  Each entry in this table consists of several lines. The line wi index number at the left hand margin lists the current function. The lines above it list the functions that called this function, and the lines below it list the functions this one called.
                                                                                                        The line with the
                               18
A unique number given to each element of the table.
Index numbers are sorted numerically.
The index number is printed next to every function name so it is easier to look up where the function is in the table.
  This line lists:
index A
                              This is the percentage of the 'total' time that was spent
in this function and its children. Note that due to
different viewpoints, functions excluded by options, etc,
these numbers will NOT add up to 100%.
         % time
                            This is the total amount of time spent in this function.
       self
                            This is the total amount of time propagated into this function by its children.  \\
       children
                            This is the number of times the function was called. If the function called itself recursively, the number only includes non-recursive calls, and is followed by a ^++' and the number of recursive calls.
       called
                            The name of the current function. The index number is
       name
```

