```cpp
#include <iostream>

#include <conio.h>

#include <string.h>

#include <string>

#include <cstring>

#include <windows.h>


using namespace std;


// Global customer ID counter

int cid = 0;


// ? Welcome Screen

void welcomeScreen() {cout << "\n\n\n\n\n\n\n\t\t\t\t@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@\n";

cout << "\t\t\t\t@@_____ @@\n";

cout << "\t\t\t\t@@|                                        |@@\n";

cout << "\t\t\t\t@@|                                        |@@\n";

cout << "\t\t\t\t@@|                                        |@@\n";

cout << "\t\t\t\t@@|                                        |@@\n";

cout << "\t\t\t\t@@|                                        |@@\n";

cout << "\t\t\t\t@@|                                        |@@\n";

cout << "\t\t\t\t@@|                 WELCOME TO             |@@\n";

cout << "\t\t\t\t@@|                                        |@@\n";

cout << "\t\t\t\t@@|              THE CAKE CHRONICLES       |@@\n";

cout << "\t\t\t\t@@|                                        |@@\n";
```

```cpp
cout << "\t\t\t\t@@|                    BAKERY MANAGEMENT SYSTEM                    |@@\n";

cout << "\t\t\t\t@@|                                                              |@@\n";

cout << "\t\t\t\t@@|                                                              |@@\n";

cout << "\t\t\t\t@@|                                                              |@@\n";

cout << "\t\t\t\t@@|                    Made by ZUNAIRA KHATOON AND UQBA GULZAR                    |@@\n";

cout << "\t\t\t\t@@|_____|@@\n";

cout << "\t\t\t\t@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@\n\n\n\n\t\t\t\t";

cout << "Press any key to continue...";

getch();}




// ? Cake Menu

void menu() {

   system("color E0");

   system("cls");

   cout << "\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t\t\t*** Welcome to the CAKE CHRONICLES menu ***" << endl<< endl;

        cout << "\t\t\t\t\t\t----------------------------------------------------------------------------" << endl << endl;

        cout << "\t\t\t\t\t\t\t     Read the menu CAREFULLY before your order" << endl  << endl;

        cout << "\t\t\t\t\t\t----------------------------------------------------------------------------" << endl<< endl;

        cout << "\t\t\t\t\t\tNumber count       Cakes                size/price        size/price" << endl<< endl;

        cout << "\t\t\t\t\t\t<1>             red velvet cake       1 pound/RS 1500     2 pound/RS 2000"<< endl;

        cout << "\t\t\t\t\t\t<2>             pineapple cake       1 pound/RS 1200     2 pound/RS 1700"<< endl;
```

```cpp
        cout << "\t\t\t\t\t\t<3>            black forest cake      1 pound/RS 2000    2 pound/RS 2500"<< endl;

        cout << "\t\t\t\t\t\t<4>            coffee cake        1 pound/RS 1250    2 pound/RS 1750"<< endl;

        cout << "\t\t\t\t\t\t<5>            cheesecake         1 pound/RS 1700    2 pound/RS 2300"<< endl;

        cout << "\t\t\t\t\t\t<6>            kitkat cake        1 pound/RS 1850    2 pound/RS 2450"<< endl;

        cout << "\t\t\t\t\t\t<7>            choclate lava cake      1 pound/RS 1800    2 pound/RS 2400"<< endl;

        cout << "\t\t\t\t\t\t<8>            marble cake        1 pound/RS 1100    2 pound/RS 1600"<< endl<< endl<< endl;

        cout<<"\n\t\t\t\t\t***enhance the taste of your buds by freshly made juicy, creamy and yummy cakes***"<< endl;

                cout<< endl<< endl;

        cout << "\t\t\t\t\t\t------------------------------------------------------------------------------" << endl;

        cout << "\t\t\t\t\t\tPress any key to continue...";


    getch();
}


// Base abstract class
class empty {
public:
    virtual void order() = 0;
};


// Base class for customer/admin shared fields
class declaration : public empty {
public:
    string ID, name, age, gender, address, contact, cake, prize, ord_no, ord_type, pound;
```

```cpp
    void order() {}
};


// Customer class
class customer : public declaration {
public:
        declaration m[10];
   string back;
   int status1;


   void get_data();


void show_data();


void order();


void edit();


void delet();


void alldata();};


void customer::get_data()
{system("color E0");
system("cls");
cout << endl<< endl<< endl<< endl<< endl<< endl<< endl<< endl<< endl<< endl;
cout<<"\t\t\t\t\t\t\tFill the entries";
cout << endl<< endl;
getline(cin, m[cid].name);
```

```cpp
cout << "\t\t\t\t\t\t\tID                  : ";
getline(cin, m[cid].ID);
cout << endl<< endl;
cout << "\t\t\t\t\t\t\tName                : ";
getline(cin, m[cid].name);
cout << endl<< endl;
cout << "\t\t\t\t\t\t\tAge                 : ";
getline(cin, m[cid].age);
cout << endl<< endl;
cout << "\t\t\t\t\t\t\tGender              : ";
getline(cin, m[cid].gender);
cout << endl<< endl;
cout << "\t\t\t\t\t\t\tAddress             : ";
getline(cin, m[cid].address);
cout << endl<< endl;
cout << "\t\t\t\t\t\t\tContact             : ";
getline(cin, m[cid].contact);
cout << endl<< endl;
back:
cout << endl<< endl;
cout << "\t\t\t\t\t\t\tProceed Forward[Y/y]    : ";
cin >> back;
if (back == "Y" || back == "y")
{cout << endl<< endl;
cout << "\t\t\t\t\t\t\tYou filled all Entries of customer successfully...";
getch();}
else
{cout << "\n\t\t\t\t\t\t\tWrong Input";
goto back;}}
```

```cpp
void customer::show_data()
{system("color E0");
system("cls");
string n;
cout << "\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t\tEnter the CUSTOMER ID  to display Record: ";
cin >> n;
system("cls");
if (n == "0")
{system("cls");
cout << "\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t\t\tOOPS!!!!" << endl;
cout << "\t\t\t\t\t\t\t\tNote: No Record To Display  Plz Go Back And Enter Some Entries...";}
else
{int i;
for (i = 0; i < cid; i++)
{status1 = 0;
if (n == m[i].ID)
{status1 = 1; //here 1 is considered as bool true
break;}}
if (status1)
{cout << "\n\n\n\n\n\n\n\n\n\n";
cout << "\t\t\t\t\t\t\t-----------------------------------" << endl<< endl;
cout << "\t\t\t\t\t\t\tID              :" << m[i].ID << endl<< endl;
cout << "\t\t\t\t\t\t\tName             :" << m[i].name << endl<< endl;
cout << "\t\t\t\t\t\t\tAge              :" << m[i].age << endl<< endl;
cout << "\t\t\t\t\t\t\tGender            :" << m[i].gender << endl<< endl;
cout << "\t\t\t\t\t\t\tAddress           :" << m[i].address << endl<< endl;
cout << "\t\t\t\t\t\t\tContact            :" << m[i].contact << endl<< endl;
```

```
cout << "\t\t\t\t\t\t\torder number        :" << m[i].ord_no << endl<< endl;

cout << "\t\t\t\t\t\t\tcake            :" << m[i].cake << endl<< endl;

cout << "\t\t\t\t\t\t\tprice            :" << m[i].prize << endl<< endl;

cout << "\t\t\t\t\t\t\t---------------------------------" << endl<< endl;

cout << "\t\t\t\t\t\t\tPress any key to choose another option...";}

else

{cout << "\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t\t\tNo such ID in database" << endl;

cout << "\t\t\t\t\t\t\tPress any key to choose another option...";}}

getch();}


void customer::order()

{system("color E0");

string ord;

above:

system("cls");

cout << "\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t\t\t*** Select Your Order ***" << endl<< endl;

cout << "\t\t\t\t\t\t\t-------------------------------------------------------" << endl<< endl;

cout << "\t\t\t\t\tNumber count      Cakes              size/price       size/price" << endl<< endl;

cout << "\t\t\t\t\t<1>          red velvet cake      1 pound/RS 1500    2 pound/RS 2000"<< endl;

cout << "\t\t\t\t\t<2>          pineapple cake       1 pound/RS 1200    2 pound/RS 1700"<< endl;

cout << "\t\t\t\t\t<3>          black forest cake    1 pound/RS 2000    2 pound/RS 2500"<< endl;

cout << "\t\t\t\t\t<4>          coffee cake          1 pound/RS 1250    2 pound/RS 1750"<< endl;

cout << "\t\t\t\t\t<5>          cheesecake           1 pound/RS 1700    2 pound/RS 2300"<< endl;

cout << "\t\t\t\t\t<6>          kitkat cake          1 pound/RS 1850    2 pound/RS 2450"<< endl;

cout << "\t\t\t\t\t<7>          choclate lava cake   1 pound/RS 1800    2 pound/RS 2400"<< endl;

cout << "\t\t\t\t\t<8>          marble cake          1 pound/RS 1100    2 pound/RS 1600"<< endl<< endl;

cout<<"\n\t\t\t\t\t***enhance the taste of your buds by freshly made juicy, creamy and yummy cakes***"<< endl;
```

```cpp
cout << "\t\t\t\t\t\t\t--------------------------------------------------------" << endl<< endl;

cout << "\t\t\t\t\t\t\tPress any key to continue...";

getch();

cout << endl<< endl;

cout << "\t\t\t\t\t\t\tEnter Your Choice:     ";

cin >> ord;

if (ord == "1")

{m[cid].ord_no = "\t\t\t\t\t\t\t1-";

cout<<m[cid].ord_no;

m[cid].cake = " red velvet cake";

cout<<m[cid].cake<<endl;

p:

cout << "\t\t\t\t\t\t\tEnter Pounds:     ";

cin>>pound;

{if(pound=="1")

{cout<<"\t\t\t\t\t\t\t1 pound"<<endl;

m[cid].prize = "1500";

cout<<"\t\t\t\t\t\t\tRS "<<m[cid].prize<<endl;

cout << "\t\t\t\t\t\t\tPress any key to continue...";

getch();}

else if (pound=="2")

{cout<<"\t\t\t\t\t\t\t2 pound"<<endl;

m[cid].prize = "2000";

cout<<"\t\t\t\t\t\t\tRS "<<m[cid].prize<<endl;

cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;

getch();}

else

{cout<<"\t\t\t\t\t\t\tno such pound cake available"<<endl;

cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;
```

```cpp
getch();
goto p;}}}
else if (ord == "2")
{m[cid].ord_no = "\t\t\t\t\t\t\t2-";
cout<<m[cid].ord_no;
m[cid].cake = " pineapple cake";
cout<<m[cid].cake<<endl;
o:
cout << "\t\t\t\t\t\t\tEnter Pounds:    ";
cin>>pound;
{if(pound=="1")
{cout<<"\t\t\t\t\t\t\t1 pound"<<endl;
m[cid].prize = "1200";
cout<<"\t\t\t\t\t\t\tRS "<<m[cid].prize<<endl;
cout << "\t\t\t\t\t\t\tPress any key to continue...";
getch();}
else if (pound=="2")
{cout<<"\t\t\t\t\t\t\t2 pound"<<endl;
m[cid].prize = "1700";
cout<<"\t\t\t\t\t\t\tRS "<<m[cid].prize<<endl;
cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;
getch();}
else
{cout<<"\t\t\t\t\t\t\tno such pound cake available"<<endl;
cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;
getch();
goto o;}}}
else if (ord == "3")
{m[cid].ord_no = "\t\t\t\t\t\t\t3-";
```

```cpp
cout<<m[cid].ord_no;

m[cid].cake = " black forest cake";

cout<<m[cid].cake<<endl;

u:

cout << "\t\t\t\t\t\t\tEnter Pounds:    ";

cin>>pound;

{if(pound=="1")

{cout<<"\t\t\t\t\t\t\t1 pound"<<endl;

m[cid].prize = "2000";

cout<<"\t\t\t\t\t\t\tRS "<<m[cid].prize<<endl;

cout << "\t\t\t\t\t\t\tPress any key to continue...";

getch();}

else if (pound=="2")

{cout<<"\t\t\t\t\t\t\t2 pound"<<endl;

m[cid].prize = "2500";

cout<<"\t\t\t\t\t\t\tRS "<<m[cid].prize<<endl;

cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;

getch();}else

{cout<<"\t\t\t\t\t\t\tno such pound cake available"<<endl;

cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;

getch();

goto u;}}}

else if (ord == "4")

{m[cid].ord_no = "\t\t\t\t\t\t\t4-";

cout<<m[cid].ord_no;

m[cid].cake = " coffee cake";

cout<<m[cid].cake<<endl;

n:

cout << "\t\t\t\t\t\t\tEnter Pounds:    ";
```

```cpp
cin>>pound;
{if(pound=="1")
{cout<<"\t\t\t\t\t\t\t1 pound"<<endl;
m[cid].prize = "1250";
cout<<"\t\t\t\t\t\t\tRS "<<m[cid].prize<<endl;
cout << "\t\t\t\t\t\t\tPress any key to continue...";
getch();}
else if (pound=="2")
{cout<<"\t\t\t\t\t\t\t2 pound"<<endl;
m[cid].prize = "1750";
cout<<"\t\t\t\t\t\t\tRS "<<m[cid].prize<<endl;
cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;
getch();}
else
{cout<<"\t\t\t\t\t\t\tno such pound cake available"<<endl;
cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;
getch();
goto n;}}}
else if (ord == "5")
{m[cid].ord_no = "\t\t\t\t\t\t\t5-";
cout<<m[cid].ord_no;
m[cid].cake = " cheese cake";
cout<<m[cid].cake<<endl;
d:
{cout << "\t\t\t\t\t\t\tEnter Pounds:    ";
cin>>pound;
{if(pound=="1")
{cout<<"\t\t\t\t\t\t\t1 pound"<<endl;
m[cid].prize = "1700";
```

```cpp
cout<<"\t\t\t\t\t\t\tRS "<<m[cid].prize<<endl;

cout << "\t\t\t\t\t\t\tPress any key to continue...";

getch();}

else if (pound=="2")

{cout<<"\t\t\t\t\t\t\t2 pound"<<endl;

m[cid].prize = "2300";

cout<<"\t\t\t\t\t\t\tRS "<<m[cid].prize<<endl;

cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;

getch();}else

{cout<<"\t\t\t\t\t\t\tno such pound cake available"<<endl;

cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;

getch();goto d;}}}}

else if (ord == "6")

{m[cid].ord_no = "\t\t\t\t\t\t\t6-";

cout<<m[cid].ord_no;

m[cid].cake = " kitkat cake";

cout<<m[cid].cake<<endl;

e:

cout << "\t\t\t\t\t\t\tEnter Pounds:    ";

cin>>pound;

{if(pound=="1")

{cout<<"\t\t\t\t\t\t\t1 pound"<<endl;

m[cid].prize = "1850";

cout<<"\t\t\t\t\t\t\tRS "<<m[cid].prize<<endl;

cout << "\t\t\t\t\t\t\tPress any key to continue...";

getch();}

else if (pound=="2")

{cout<<"\t\t\t\t\t\t\t2 pound"<<endl;

m[cid].prize = "2450";
```

```cpp
cout<<"\t\t\t\t\t\t\tRS "<<m[cid].prize<<endl;

cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;

getch();}else

{cout<<"\t\t\t\t\t\t\tno such pound cake available"<<endl;

cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;

getch();

goto e;}}}

else if (ord == "7")

{m[cid].ord_no = "\t\t\t\t\t\t\t7-";

cout<<m[cid].ord_no;

m[cid].cake = " choclate lava cake";

cout<<m[cid].cake<<endl;

f:

cin>>pound;

cout << "\t\t\t\t\t\t\tEnter Pounds:    ";

cin>>pound;

{if(pound=="1")

{cout<<"\t\t\t\t\t\t\t1 pound"<<endl;

m[cid].prize = "1800";

cout<<"\t\t\t\t\t\t\tRS "<<m[cid].prize<<endl;

cout << "\t\t\t\t\t\t\tPress any key to continue...";

getch();}

else if (pound=="2")

{cout<<"\t\t\t\t\t\t\t2 pound"<<endl;

m[cid].prize = "2400";

cout<<"\t\t\t\t\t\t\tRS "<<m[cid].prize<<endl;

cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;

getch();}else

{cout<<"\t\t\t\t\t\t\tno such pound cake available"<<endl;
```

```cpp
cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;

getch();

goto f;}}}

else if (ord == "8")

{m[cid].ord_no = "\t\t\t\t\t\t\t8-";

cout<<m[cid].ord_no;

m[cid].cake = " marble cake";

cout<<m[cid].cake<<endl;

g:

cout << "\t\t\t\t\t\t\tEnter Pounds:     ";

cin>>pound;

{if(pound=="1")

{cout<<"\t\t\t\t\t\t\t1 pound"<<endl;

m[cid].prize = "1100";

cout<<"\t\t\t\t\t\t\tRS "<<m[cid].prize<<endl;

cout << "\t\t\t\t\t\t\tPress any key to continue...";

getch();}

else if (pound=="2")

{cout<<"\t\t\t\t\t\t\t2 pound"<<endl;

m[cid].prize = "1600";

cout<<"\t\t\t\t\t\t\tRS "<<m[cid].prize<<endl;

cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;

getch();}else

{cout<<"\t\t\t\t\t\t\tno such pound cake available"<<endl;

cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;

getch();

goto g;}}}else

{system("cls");

cout << "\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t\t\t\tWrong Input" << endl;
```

```cpp
cout << "\t\t\t\t\t\t\t\tPress any key to choose another option...";

getch();

goto above;}}


void customer::edit()

{system("color E0");

system("cls");

string n;

cout << "\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t\tEnter the customer's ID  to display Record: ";

cin >> n;

system("cls");

if (n == "0")

{system("cls");

cout << "\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t\t\tOOPS!!!!" << endl;

cout << "\t\t\t\t\t\t\t\tNote: No Record To Display  Plz Go Back And Enter Some Entries...";}

        else

        {       int i;

                for (i = 0; i <cid; i++)

        {status1 = 0;

                        if (n == m[i].ID)

                        {status1 = 1; //here 1 is considered as bool true

                        break;} }

                if (status1)

                {system("cls");

                cout << endl<< endl<< endl;

                        cout << "\t\t\t\t\t\t\tMention a customer id     : ";

                        cin.ignore();

                        getline(cin, m[i].ID);

                        cout << endl<< endl;
```

```cpp
				cout << "\t\t\t\t\t\t\tName                    : ";

				getline(cin, m[i].name);

				cout << endl<< endl;

				cout << "\t\t\t\t\t\t\tAge                 : ";

				getline(cin, m[i].age);

				cout << endl<< endl;

				cout << "\t\t\t\t\t\t\tGender                  : ";

				getline(cin, m[i].gender);

				cout << endl<< endl;

				cout << "\t\t\t\t\t\t\tAddress             : ";

				getline(cin, m[i].address);

				cout << endl<< endl;

				cout << "\t\t\t\t\t\t\tContact             : ";

				getline(cin, m[i].contact);

				menu();

				string ord;

		above2:

				system("cls");

	cout << "\n\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t\t\t*** Select Your Order ***" << endl<< endl;

				cout << "\t\t\t\t\t\t\t---------------------------------------------------------" << endl<< endl;

				cout << "\t\t\t\t\t\tNumber count     Cakes                 size/price      size/price" << endl<< endl;

		cout << "\t\t\t\t\t\t<1>           red velvet cake      1 pound/RS 1500    2 pound/RS 2000"<< endl;

		cout << "\t\t\t\t\t\t<2>           pineapple cake       1 pound/RS 1200     2 pound/RS 1700"<< endl;

		cout << "\t\t\t\t\t\t<3>           black forest cake    1 pound/RS 2000     2 pound/RS 2500"<< endl;

		cout << "\t\t\t\t\t\t<4>           coffee cake          1 pound/RS 1250    2 pound/RS 1750"<< endl;
```

```cpp
		cout << "\t\t\t\t\t\t<5>          cheesecake          1 pound/RS 1700    2 pound/RS 2300"<<
endl;

		cout << "\t\t\t\t\t\t<6>          kitkat cake          1 pound/RS 1850    2 pound/RS 2450"<<
endl;

		cout << "\t\t\t\t\t\t<7>          choclate lava cake    1 pound/RS 1800    2 pound/RS
2400"<< endl;

cout << "\t\t\t\t\t\t<8>          marble cake          1 pound/RS 1100    2 pound/RS 1600"<< endl<<
endl<< endl<< endl;

cout << "\t\t\t\t\t\t\t---------------------------------------------------------" << endl<< endl;

		cout << "\t\t\t\t\t\t\tPress any key to continue...";

		getch();

		cout << endl<< endl;

		cout << "\t\t\t\t\t\t\tEnter Your Choice:    ";

		cin >> ord;

		if (ord == "1")

		{m[i].ord_no = "\t\t\t\t\t\t\t1-";

		cout<<m[i].ord_no;

		m[i].cake = " red velvet cake";

		cout<<m[i].cake<<endl;

			p:

				cout << "\t\t\t\t\t\t\tEnter Pounds:    ";

				cin>>pound;

			{if(pound=="1")

			{cout<<"\t\t\t\t\t\t\t1 pound"<<endl;

			m[i].prize = "1500";

			cout<<"\t\t\t\t\t\t\tRS "<<m[i].prize<<endl;

			cout << "\t\t\t\t\t\t\tPress any key to continue...";

		getch();}

			else if (pound=="2")

			{cout<<"\t\t\t\t\t\t\t2 pound"<<endl;
```

```cpp
            m[i].prize = "2000";

            cout<<"\t\t\t\t\t\t\tRS "<<m[i].prize<<endl;

            cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;
    getch();

            }else

            {cout<<"\t\t\t\t\t\t\tno such pound cake available"<<endl;

            cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;
    getch();

            goto p;}}}
    else if (ord == "2")
{       m[i].ord_no = "\t\t\t\t\t\t\t2-";

    cout<<m[i].ord_no;

    m[i].cake = " pineapple cake";

            cout<<m[i].cake<<endl;

            o:

            cout << "\t\t\t\t\t\t\tEnter Pounds:    ";

                    cin>>pound;

            {if(pound=="1")

            {cout<<"\t\t\t\t\t\t\t1 pound"<<endl;

            m[i].prize = "1200";

            cout<<"\t\t\t\t\t\t\tRS "<<m[i].prize<<endl;

            cout << "\t\t\t\t\t\t\tPress any key to continue...";
    getch();}

            else if (pound=="2")

            {cout<<"\t\t\t\t\t\t\t2 pound"<<endl;

            m[i].prize = "1700";

            cout<<"\t\t\t\t\t\t\tRS "<<m[i].prize<<endl;

            cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;
    getch();}else
```

```cpp
                {cout<<"\t\t\t\t\t\t\tno such pound cake available"<<endl;

                cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;

        getch();goto o;}}}

        else if (ord == "3")

{m[i].ord_no = "\t\t\t\t\t\t\t3-";

cout<<m[i].ord_no;

m[i].cake = " black forest cake";

        cout<<m[i].cake<<endl;

                u:

        cout << "\t\t\t\t\t\t\tEnter Pounds:    ";

                        cin>>pound;

                {if(pound=="1")

                {cout<<"\t\t\t\t\t\t\t1 pound"<<endl;

                m[i].prize = "2000";

                cout<<"\t\t\t\t\t\t\tRS "<<m[i].prize<<endl;

                cout << "\t\t\t\t\t\t\tPress any key to continue...";

        getch();}

                else if (pound=="2")

                {cout<<"\t\t\t\t\t\t\t2 pound"<<endl;

                m[i].prize = "2500";

                cout<<"\t\t\t\t\t\t\tRS "<<m[i].prize<<endl;

                cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;

        getch();

                }else

                {cout<<"\t\t\t\t\t\t\tno such pound cake available"<<endl;

                cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;

        getch();goto u;}}}

else if (ord == "4")

        {       m[i].ord_no = "\t\t\t\t\t\t\t4-";
```

```cpp
                cout<<m[i].ord_no;

                    m[i].cake = " coffee cake";

                        cout<<m[i].cake<<endl;

            n:

            cout << "\t\t\t\t\t\t\tEnter Pounds:    ";

                    cin>>pound;

            {if(pound=="1")

            {cout<<"\t\t\t\t\t\t\t1 pound"<<endl;


            m[i].prize = "1250";

            cout<<"\t\t\t\t\t\t\tRS "<<m[i].prize<<endl;

            cout << "\t\t\t\t\t\t\tPress any key to continue...";

getch();}

            else if (pound=="2")

            {cout<<"\t\t\t\t\t\t\t2 pound"<<endl;

            m[i].prize = "1750";

            cout<<"\t\t\t\t\t\t\tRS "<<m[i].prize<<endl;

            cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;

getch(); }else

{cout<<"\t\t\t\t\t\t\tno such pound cake available"<<endl;

cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;

getch(); goto n;}}}

else if (ord == "5")

{                   m[i].ord_no = "\t\t\t\t\t\t\t5-";

cout<<m[i].ord_no;

            m[i].cake = " cheese cake";

                    cout<<m[cid].cake<<endl;

            d:

            cout << "\t\t\t\t\t\t\tEnter Pounds:    ";
```

```cpp
            cin>>pound;
        {if(pound=="1")
        {cout<<"\t\t\t\t\t\t\t1 pound"<<endl;
        m[i].prize = "1700";
        cout<<"\t\t\t\t\t\t\tRS "<<m[i].prize<<endl;
        cout << "\t\t\t\t\t\t\tPress any key to continue...";
getch();}
        else if (pound=="2")
        {cout<<"\t\t\t\t\t\t\t2 pound"<<endl;
        m[i].prize = "2300";
        cout<<"\t\t\t\t\t\t\tRS "<<m[i].prize<<endl;
        cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;
getch();      }else
        {cout<<"\t\t\t\t\t\t\tno such pound cake available"<<endl;
        cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;
getch(); goto d;}}}
else if (ord == "6")
{              m[i].ord_no = "\t\t\t\t\t\t\t6-";
        cout<<m[i].ord_no;
        m[i].cake = " kitkat cake";
              cout<<m[i].cake<<endl;
        e:
        cout << "\t\t\t\t\t\t\tEnter Pounds:    ";
              cin>>pound;
        {if(pound=="1")
        {cout<<"\t\t\t\t\t\t\t1 pound"<<endl;
              m[i].prize = "1850";
        cout<<"\t\t\t\t\t\t\tRS "<<m[i].prize<<endl;
        cout << "\t\t\t\t\t\t\tPress any key to continue...";
```

```cpp
getch();}
                else if (pound=="2")
                {cout<<"\t\t\t\t\t\t\t2 pound"<<endl;
                m[i].prize = "2450";
                cout<<"\t\t\t\t\t\t\tRS "<<m[i].prize<<endl;
                cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;
        getch(); }else
        {cout<<"\t\t\t\t\t\t\tno such pound cake available"<<endl;
        cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;
        getch();    goto e;}}}
else if (ord == "7")
                {       m[i].ord_no = "\t\t\t\t\t\t\t7-";
                cout<<m[i].ord_no;
                m[i].cake = " choclate lava cake";
                        cout<<m[i].cake<<endl;
                f:
                cin>>pound;
                cout << "\t\t\t\t\t\t\tEnter Pounds:    ";
                        cin>>pound;
                {if(pound=="1")
                {cout<<"\t\t\t\t\t\t\t1 pound"<<endl;
                m[i].prize = "1800";
                cout<<"\t\t\t\t\t\t\tRS "<<m[i].prize<<endl;
                cout << "\t\t\t\t\t\t\tPress any key to continue...";
        getch();}
                else if (pound=="2")
                {cout<<"\t\t\t\t\t\t\t2 pound"<<endl;
                m[i].prize = "2400";
                cout<<"\t\t\t\t\t\t\tRS "<<m[i].prize<<endl;
```

```cpp
                cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;
        getch();          }else
                {cout<<"\t\t\t\t\t\t\tno such pound cake available"<<endl;
                cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;
        getch(); goto f;}}}
else if (ord == "8")
        {         m[i].ord_no = "\t\t\t\t\t\t\t8-";
                cout<<m[i].ord_no;
                        m[i].cake = " marble cake";
                                cout<<m[i].cake<<endl;
                g:
                cout << "\t\t\t\t\t\t\tEnter Pounds:     ";
                        cin>>pound;
                {if(pound=="1")
                {cout<<"\t\t\t\t\t\t\t1 pound"<<endl;
                m[i].prize = "1100";
                cout<<"\t\t\t\t\t\t\tRS "<<m[i].prize<<endl;
                cout << "\t\t\t\t\t\t\tPress any key to continue...";
        getch();}
                else if (pound=="2")
                {cout<<"\t\t\t\t\t\t\t2 pound"<<endl;
                m[i].prize = "1600";
                cout<<"\t\t\t\t\t\t\tRS "<<m[i].prize<<endl;
                cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;
        getch(); }else
                {cout<<"\t\t\t\t\t\t\tno such pound cake available"<<endl;
                cout << "\t\t\t\t\t\t\tPress any key to continue..."<<endl;
        getch();          goto g;}}}
        else   { system("cls");
```

```cpp
		cout << "\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t\t\tWrong Input" << endl;

		cout << "\t\t\t\t\t\t\t\tPress any key to choose another option...";

		getch();

		goto above2;    }

}

else

{cout << "\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t\t\tNo such ID in database" << endl;

cout << "\t\t\t\t\t\t\tPress any key to choose another option...";}}

		getch();}


void customer::delet()

{		system("color E0");

		system("cls");

		string n;

		cout << "\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t\tEnter the member's ID  to display
Record: ";

		cin >> n;

		system("cls");

		if (n == "0")

		{		system("cls");

				cout << "\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t\t\tOOPS!!!!" << endl;

				cout << "\t\t\t\t\t\t\t\tNote: No Record To Display  Plz Go Back And Enter Some
Entries...";}

		else	{int i;

				for (i = 0; i < cid; i++)

				{		status1 = 0;

						if (n == m[i].ID)

						{		status1 = 1; //here 1 is considered as bool true

								break;}}
```

```cpp
if (status1)         {m[i].ID, m[i].name, m[i].age,m[i].gender, m[i].address, m[i].contact, m[i].ord_no,
m[i].cake, m[i].prize, m[i].ord_type = "Removed";

                    cout << "\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t\tRecord Deleted...";

                    getch();}
else     {cout << "\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t\tNo such ID in database" << endl;

                cout << "\t\t\t\t\t\tPress any key to choose another option...";

        getch();}}}


        void customer::alldata()
{        system("cls");

        system("color E0");

        if (cid == 0)

        {        system("cls");

                cout << "\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t\tOOPS!!!!" << endl;

                cout << "\t\t\t\t\t\tNote: No Record To Display  Plz Go Back And Enter Some
Entries...";}

        else
{cout << "\n\n\n\n\n\n\n\t\t\t\t\t-------------------------------------------------------------------------------" <<
endl<< endl;

                cout << "\t\t\t\t\t\t\t  Details Of All orders" << endl<< endl;

                cout << "\t\t\t\t\t\t-------------------------------------------------------------------------" <<
endl<< endl;

cout << "ID"<< "\t"<< "NAME"<< "\t\t"<< "AGE"<< "\t\t"<< "Gender"<< "\t\t"<< "Address"<< "\t\t"<<
"Contact"<< "\t\t"<< "cake"<< "\t\t"<< "price"<< "\t\t"<< "order type"<< endl<< endl;

                for (int i = 0; i < cid; i++)
{cout << m[i].ID << "\t"<< m[i].name<< "\t\t"<< m[i].age<< "\t\t" <<m[i].gender<< "\t\t"<<
m[i].address<< "\t\t"<< m[i].contact<< "\t\t"<< m[i].cake<< "\t\t"<< m[i].prize<<"\t\t"<<
m[i].ord_type<< endl<< endl;}

                cout << "\t\t\t\t\t\t-------------------------------------------------------------------------" <<
endl<< endl;

                cout << "\n\t\t\t\t\tPress any key to choose another option...";}

        getch();}
```

```cpp
// ? Admin Class
class admin {
private:
    string username = "admin";
    string password = "1234";
public:
    customer obj;

    bool login() {
        string user, pass;
        int attempts = 3;
        while (attempts > 0) {
            system("cls");
            cout << "\n\n\n\t\t\t\t*** Admin Login ***\n";
            cout << "\t\t\t\tUsername: ";
            cin >> user;
            cout << "\t\t\t\tPassword: ";
            pass = "";
            char ch = _getch();
            while (ch != 13) {
                if (ch == 8) {
                    if (!pass.empty()) {
                        pass.pop_back();
                        cout << "\b \b";
                    }
                }
```

```cpp
        else {

            pass.push_back(ch);

            cout << '*';

        }

        ch = _getch();

    }


    if (user == username && pass == password) {

        cout << "\n\n\t\t\t\t\tLogin Successful!";

        Sleep(1000);

        return true;

    }

    else {

        attempts--;

        cout << "\n\n\t\t\t\t\tInvalid Credentials! Attempts left: " << attempts;

        Sleep(1500);

    }

}

cout << "\n\n\t\t\t\t\tToo many failed attempts. Access Denied!";

Sleep(2000);

return false;

}


void adminMenu() {

    string ch,ch1;

    int count = 0;

    int status1;

    do {

        system("cls");
```

```cpp
cout << "\n\n\t\t\t\t*** Admin Panel ***\n";

cout << "\t\t\t\t1. Order Management\n";

cout << "\t\t\t\t2. Logout\n";

cout << "\n\t\t\t\tEnter your choice: ";

cin >> ch;



if (ch == "1") {

                    secondmain:

                    system("cls");

                    cout << "\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t*** ORDER MANAGEMENT
System ***" << endl<< endl;

    cout << "\t\t\t\t\t\t\t-------------------------------------------" << endl<< endl;

    cout << "\t\t\t\t\t\t\t<1> View Menu" << endl<< endl;

    cout << "\t\t\t\t\t\t\t<2> View All Orders" << endl      << endl;

    cout << "\t\t\t\t\t\t\t<3> Delete order" << endl<< endl;

    cout << "\t\t\t\t\t\t\t<4> Exit" << endl<< endl;

    cout << "\t\t\t\t\t\t\t-------------------------------------------" << endl<< endl;

    cout << "\t\t\t\t\t\t\tEnter Your Choice:    ";

    cin >> ch1;



                    if (ch1 == "1")

            {       menu();

            goto secondmain;}



            else if (ch1 == "2")

            {       if (count == 0)

                    {system("cls");

                    cout << "\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t\t\tOOPS!!!!" <<
endl;
```

```cpp
                    cout << "\t\t\t\t\t\t\t\tNote: No Record To Display  Plz Go Back And Enter
Some Entries...";

                        getch();

                        goto secondmain;}

                        else {  obj.alldata();

                                goto secondmain;}        }


else if (ch1 == "3")

                    {if (count == 0)  {         system("cls");

                    cout << "\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t\t\t\tOOPS!!!!" << endl;

                    cout << "\t\t\t\t\t\t\t\tNote: No Record To Display  Plz Go Back And Enter Some
Entries...";

                    getch();

                    goto secondmain;        }

                    else    { obj.delet();

                            goto secondmain;}}
    }
        else if (ch == "2") { cout << "\n\n\t\t\t\tLogging out..."; Sleep(1000); }
        else { cout << "\n\n\t\t\t\tInvalid choice! Try again."; Sleep(1000); }
      } while (ch != "2");
  }


};


// ? MAIN PROGRAM
int main() {
  system("color E0");
  welcomeScreen();
```

```cpp
    string choice;

    admin adminObj;

    customer obj;


    system("cls");

    cout << "\n\n\n\t\t\t\t*** Login Portal ***\n";

    cout << "\t\t\t\t----------------------\n";

    cout << "\t\t\t\t1. Admin Login\n";

    cout << "\t\t\t\t2. Customer Login\n";

    cout << "\n\t\t\t\tEnter your choice: ";

    cin >> choice;


    if (choice == "1") {

       if (adminObj.login()) {

          adminObj.adminMenu();

       }

    }

    else if (choice == "2") {

      {string ch,ch1;

      int count=0;

        mainmenu:

system("cls");

cout << "\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t*** Welcome to the CAKE BAKERY MANAGEMENT System ***" << endl<< endl;

          cout << "\t\t\t\t\t\t\t-------------------------------------------" << endl<< endl;

          cout << "\t\t\t\t\t\t\t<1> Order" << endl<< endl;

          cout << "\t\t\t\t\t\t\t<2> Cakes Menu" << endl          << endl;

          cout << "\t\t\t\t\t\t\t<3> Instructions/Help" << endl<< endl;

          cout << "\t\t\t\t\t\t\t<4> Exit" << endl<< endl;
```

```cpp
		cout << "\t\t\t\t\t\t\t-------------------------------------------" << endl<< endl;

		cout << "\t\t\t\t\t\t\tEnter Your Choice:    ";

		cin >> ch;

		if (ch == "1")

		{        secondmain:

		system("cls");

		cout << "\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t\t\t*** Welcome to the Main Menu ***"
<< endl<< endl;

		cout << "\t\t\t\t\t\t\t----------------------------------------------" << endl<< endl;

		cout << "\t\t\t\t\t\t\t<1> Place Order" << endl<< endl;

		cout << "\t\t\t\t\t\t\t<2> View Your Order" << endl<< endl;

		cout << "\t\t\t\t\t\t\t<3> Edit Your Order" << endl<< endl;

		cout << "\t\t\t\t\t\t\t<4> Delete Your Order" << endl<< endl;

		cout << "\t\t\t\t\t\t\t<5> Go Back" << endl<< endl;

		cout << "\t\t\t\t\t\t\t----------------------------------------------" << endl<< endl;

		cout << "\t\t\t\t\t\t\tEnter Your choice:    ";

		cin >> ch1;

		if (ch1 == "1")

				{        obj.get_data();

				system("cls");

				menu();

				obj.order();

						cout<< endl<< endl;

				cout << "\t\t\t\t\t\t\torder successfully placed";

				getch();

				cid++;

				count++;

				goto secondmain;}
```

```cpp
else if (ch1 == "2")
{        if (count == 0)   {          system("cls");
                cout << "\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t\t\t\tOOPS!!!!" << endl;
                cout << "\t\t\t\t\t\t\t\tNote: No Record To Display  Plz Go Back And Enter Some Entries...";
                getch();
                goto secondmain;}
                else
                {obj.show_data();
                goto secondmain;          }}
        else if (ch1 == "3")
        {          if (count == 0) { system("cls");
        cout << "\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t\t\t\tOOPS!!!!" << endl;
        cout << "\t\t\t\t\t\t\t\tNote: No Record To Display  Plz Go Back And Enter Some Entries...";
                        getch();
        goto secondmain;              }
                        else
        {obj.edit();        goto secondmain;              }}


                        else if (ch1 == "4")
        {if (count == 0)  {          system("cls");
        cout << "\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t\t\t\tOOPS!!!!" << endl;
        cout << "\t\t\t\t\t\t\t\tNote: No Record To Display  Plz Go Back And Enter Some Entries...";
        getch();
        goto secondmain;        }
        else    { obj.delet();
                        goto secondmain;}}
        else if (ch1 == "5")
```

```cpp
{       goto mainmenu; }

        else

{       system("cls");

        cout << "\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t\t\t\tWrong Input" << endl;

        cout << "\t\t\t\t\t\t\t\tPress any key to choose another option...";

        getch();

        goto secondmain;        }}
else if (ch == "2")

{       menu();

        goto mainmenu;          }

        else if (ch == "3")     {    system("cls");

cout << "\n\n\n\n\n\t\t\t\t   -------------------------------------------------------------------------------------------------
------" << endl<< endl;

cout << "\t\t\t\tThe most important thing note while running this program is that first of all enter into
main menu and " << endl;

cout << "\t\tthan start with entering the data and than afterwards you can book your order. This is a
data management" <<endl;

cout << "\t\tsystem of cake bakery in which you can easily book your cake orders and also delete any
order if you want. "<<endl;

cout << "\t\t\t\t   -------------------------------------------------------------------------------------------------" <<
endl<< endl;

                cout << "\t\t\t\t   Press any key to choose another option...";

                getch();

                goto mainmenu;}

        else if (ch == "4")

        {       system("cls");

        cout <<
"\n\n\n\n\n\t\t\t\t\t\t@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@
@\n";

cout << "\t\t\t\t\t@@_____
_____ @@\n";

                cout << "\t\t\t\t\t@@|                                                     |@@\n";
```

```cpp
            cout << "\t\t\t\t@@|                                                |@@\n";
            cout << "\t\t\t\t@@|                                                |@@\n";
            cout << "\t\t\t\t@@|                                                |@@\n";
            cout << "\t\t\t\t@@|                                                |@@\n";
            cout << "\t\t\t\t@@|                 THANK YOU FOR USING            |@@\n";
            cout << "\t\t\t\t@@|                                                |@@\n";
            cout << "\t\t\t\t@@|          CAKE BAKERY MANAGEMENT SYSTEM         |@@\n";
            cout << "\t\t\t\t@@|                                                |@@\n";
            cout << "\t\t\t\t@@|                                                |@@\n";
            cout << "\t\t\t\t@@|                                                |@@\n";
            cout << "\t\t\t\t@@|                                                |@@\n";
            cout << "\t\t\t\t@@|                                                |@@\n";
            cout << "\t\t\t\t@@|             Made by ZUNAIRA & UQBA             |@@\n";
            cout << "\t\t\t\t@@|_____|@@\n";
            cout << "\t\t\t\t@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@\n\n\n\n\t\t\t\t";}
else    {       system("cls");
                cout << "\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\t\t\t\t\t\t\tWrong Input" << endl;
                cout << "\t\t\t\t\t\t\t\tPress any key to choose another option...";
                getch();
                goto mainmenu;}
}



        cout << "\n\n\t\t\t\tOrder successfully booked!";
```

```cpp
        cout << "\n\n\t\t\t\t\tPress any key to exit...";

        getch();

    }

}
```