OOP PROJECT

SOURCE CODE

```
//Object-Oreinted-Programming Project
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//Project Name: Feasomed

#include <iostream>
#include <iomanip>
#include <windows.h>
#include <vector>
#include <fstream>
#include <string>
#include <sstream>
#include <conio.h>

using namespace std;

int main();

//Login Class
```

```
class Login
{
   char login[30];
   char pass[30];

public:
   int check(const char *a, const char *b)
   {
      if (strcmp(a, login) == 0 && strcmp(b, pass) == 0)
      {
         return 1;
      }
      return 0;
   }
   Login(const char *a, const char *b)
   {
      strcpy(login, a);
      strcpy(pass, b);
   }
};

//Market Class
class market
{
public:
   char prod[20];
   int price;
   long int total;
   int sr_no;
};
```

```
//Item Class
class item
{
public:
   int quantity;
   int limit;
   int sr_no;
   int code;
   char name[20];
   int order_quantity = 0;
};

//Wholesaler Class
class wholesaler
{
public:
   char name[20];
   int rating;
   char r_id[30];
   char r_pass[30];
   int price;
   item items;
   char address[100];
   bool cofirmation = 0;
};

//Order Class
//Inheritance
class order : public item
```

```
{
};

//Main Storage Class
class mainStorage
{
public:
   item items;
};

//Class for State
//Inheritance
class st : public mainStorage
{
public:
   char s_name[20];
   char s_id[30];
   char s_pass[30];
   int o = 0;
};

//Class for Region
//Inheritance
class reg : public st
{
public:
   char r_name[20];
   int r_id;
};
```

```
//Class for Hospital
//Inheritance
class hos : public reg
{
public:
   char h_name[30];
   char h_id[30];
   char h_pass[30];
};

vector<hos> h;

mainStorage obj;

//Function For Admin
int admin()
{

   cout << "Welcome" << endl
        << endl;
   cout << endl
        << endl
        << endl
        << endl
        << "Please select an appropriate option:-" << endl
        << endl;
   cout << " 1.Add State" << endl
        << " 2.Add Item" << endl
        << " 3.Check items" << endl
        << " 4.Delete Item" << endl
```

```
        << " 5.Change item" << endl
        << " 6.Check States" << endl
        << " 7.Add Wholesaler" << endl
        << " 8.Check Wholesaler" << endl
        << " 9.Goto Login Page" << endl
        << " 10.Exit the System" << endl
        << endl
        << "Enter the required option:-";

    int option;

    cin >> option;

    //Option 1
    //Add State
    if (option == 1)
    {
        st S;
        fstream all_states("states.txt");

        all_states.seekg(0, ios::end);
        int no_states = all_states.tellg() / sizeof(S);

        int n;
        cout << "enter number of states to be added :- ";
        cin >> n;

        for (int i = 0; i < n; i++)
        {
            cout << "Sr. No. :- " << no_states + 1 << endl;
```

```
        cout << "Name of state :- ";
        cin >> S.s_name;

        char id[30] = "ID_";
        char pass[30] = "PASS_";

        strcat(id, S.s_name);
        strcat(pass, S.s_name);

        strcpy(S.s_id, id);
        strcpy(S.s_pass, pass);

        all_states.write((char *)&S, sizeof(S));
        char state_name[20];

        strcpy(state_name, S.s_name);
        strcat(state_name, ".txt");

        ofstream S1(state_name);
        fstream temp_s("temp_s.txt");

        cout << "\n\n\nState :- " << S.s_name << " added with Login ID :- " << id << " and
Password :- " << pass << endl;

        if (temp_s && S1)
        {
            string line;
            while (getline(temp_s, line))
            {
                S1 << line;
```

```
            }

            S1.close();
            temp_s.close();

            no_states++;
        }
    }
  }

  //Option 2
  //Add Item
  else if (option == 2)
  {

    ifstream in_file("main_storage.txt", ios::binary);
    in_file.seekg(0, ios::end);

    int file_size = in_file.tellg();
    mainStorage object;

    int n;
    int no_items = file_size / sizeof(object);

    cout << "Enter number of items to be added:- ";
    cin >> n;

    for (int i = 0; i < n; i++)
    {
        cout << "Sr. No. :- " << no_items + 1 << endl;
```

```
        object.items.sr_no = no_items + 1;
        cout << "Name :- ";

        cin >> object.items.name;
        cout << "Product Code:- ";

        cin >> object.items.code;
        object.items.quantity = 0;
        object.items.limit = 0;

        ofstream file1;

        file1.open("main_storage.txt", ios::app);
        file1.write((char *)&object, sizeof(object));

        file1.close();
        st S;

        fstream all_states("states.txt");
        all_states.seekg(0, ios::end);

        int no_states = all_states.tellg() / sizeof(S);
        all_states.seekg(0, ios::beg);

        for (int i = 0; i < no_states; i++)
        {
            all_states.read((char *)&S, sizeof(S));
            char state_name[20];

            strcpy(state_name, S.s_name);
```

```
        strcat(state_name, ".txt");

        ofstream fp(state_name, ios::app);
        st S1;

        S1.items.sr_no = no_items + 1;
        strcpy(S1.items.name, object.items.name);

        S1.items.quantity = 0;
        S1.items.limit = 0;

        S1.items.code = object.items.code;
        fp.write((char *)&S1, sizeof(S1));

        fp.close();
    }

    ofstream fp1("temp_s.txt", ios::app);
    st S2;

    S2.items.sr_no = no_items + 1;
    strcpy(S2.items.name, object.items.name);

    S2.items.quantity = 0;
    S2.items.limit = 0;

    S2.items.code = object.items.code;
    fp1.write((char *)&S2, sizeof(S2));

    fp1.close();
```

```
        file1.close();

        ofstream fp2("temp_h.txt", ios::app);

        hos h2;

        h2.items.sr_no = no_items + 1;
        strcpy(h2.items.name, object.items.name);

        h2.items.quantity = 0;
        h2.items.limit = 0;

        h2.items.code = object.items.code;
        fp2.write((char *)&h2, sizeof(h2));

        fp2.close();
        file1.close();

        no_items++;
      }

     cout << endl
          << endl
          << endl
          << "Items Added Successfully" << endl;
   }

   //Option 3
   //Check Items
   else if (option == 3)
```

```
    {
        mainStorage ms;
        ifstream file2;

        file2.open("main_storage.txt", ios::in);
        file2.seekg(0, ios::end);

        int file_size = file2.tellg();
        int n_items = file_size / sizeof(ms);
        file2.seekg(0, ios::beg);

        for (size_t i = 0; i < n_items; i++)
        {
            file2.read((char *)&ms, sizeof(ms));

            cout << ms.items.sr_no << endl;
            cout << ms.items.name << endl;
            cout << ms.items.quantity << endl;
            cout << ms.items.limit << endl;
            cout << ms.items.code << endl
                 << endl;
        }
        file2.close();
    }

    //Option 4
    //Delete Items
    else if (option == 4)
    {
        int i = 1;
```

```
    fstream file2("main_storage.txt", ios::in);
    fstream file3("dup.txt", ios::app);

    mainStorage md;

    long long n;

    cout << "Enter the code of the product you want to delete : ";

    cin >> n;

    while (file2.read((char *)&md, sizeof(md)))
    {
        if (n == md.items.code)
        {
            continue;
        }

        else
        {
            md.items.sr_no = i;
            file3.write((char *)&md, sizeof(md));
        }
        i++;
    }
    file2.close();
    file3.close();

    remove("main_storage.txt");
```

```
    rename("dup.txt", "main_storage.txt");

    fstream file1("temp_s.txt");
    file2.open("dup1.txt", ios::app);

    st sd;

    i = 1;

    while (file1.read((char *)&sd, sizeof(sd)))
    {
        if (n == sd.items.code)
        {
            continue;
        }

        else
        {
            sd.items.sr_no = i;
            file2.write((char *)&sd, sizeof(sd));
        }
        i++;
    }

    file1.close();
    file2.close();

    remove("temp_s.txt");
    rename("dup1.txt", "temp_s.txt");
```

```
    file1.open("states.txt", ios::in);

    file1.seekg(0, ios::end);
    int no_states = file1.tellg() / sizeof(sd);
    file1.seekg(0, ios::beg);

    int j = 1;

    for (i = 0; i < no_states; i++)
    {
        file1.read((char *)&sd, sizeof(sd));
        char state_name[20];

        strcpy(state_name, sd.s_name);
        strcat(state_name, ".txt");

        fstream file2(state_name);

        st sdd;

        fstream file3("dup3.txt", ios::app);

        while (file2.read((char *)&sdd, sizeof(sdd)))
        {
            if (n == sdd.items.code)
            {
                continue;
            }

            else
```

```
            {
                sdd.items.sr_no = j;
                file3.write((char *)&sdd, sizeof(sdd));
            }
            j++;
        }

        file2.close();
        file3.close();

        remove(state_name);
        rename("dup3.txt", state_name);
    }
    file1.close();
  }

  //Option 5
  //Change Items
  else if (option == 5)
  {
    int i = 1;
    char name[30];
    int code;

    fstream file2("main_storage.txt", ios::in);
    fstream file3("dup.txt", ios::app);
    mainStorage md;

    long long n;
```

```
    cout << "Enter the code of the product you want to Update : ";

    cin >> n;
    cout << "Enter the name of new product :- ";
    cin >> name;
    cout << "Enter the Product Code :- ";
    cin >> code;

    while (file2.read((char *)&md, sizeof(md)))
    {
        if (n == md.items.code)
        {
            md.items.sr_no = i;
            md.items.code = code;

            strcpy(md.items.name, name);

            md.items.quantity = 0;
            md.items.limit = 0;

            file3.write((char *)&md, sizeof(md));
        }

        else
        {
            md.items.sr_no = i;
            file3.write((char *)&md, sizeof(md));
        }
        i++;
    }
```

```
        file2.close();
        file3.close();

        remove("main_storage.txt");
        rename("dup.txt", "main_storage.txt");

        fstream file1("temp_s.txt");
        file2.open("dup1.txt", ios::app);

        st sd;

        i = 1;

        while (file1.read((char *)&sd, sizeof(sd)))
        {
            if (n == sd.items.code)
            {
                sd.items.sr_no = i;
                sd.items.code = code;

                strcpy(sd.items.name, name);

                sd.items.quantity = 0;
                sd.items.limit = 0;

                file2.write((char *)&sd, sizeof(sd));
            }

            else
            {
```

```
            sd.items.sr_no = i;
            file2.write((char *)&sd, sizeof(sd));
        }
        i++;
    }

    file1.close();
    file2.close();

    remove("temp_s.txt");
    rename("dup1.txt", "temp_s.txt");

    file1.open("states.txt", ios::in);

    file1.seekg(0, ios::end);
    int no_states = file1.tellg() / sizeof(sd);
    file1.seekg(0, ios::beg);

    int j = 1;

    for (i = 0; i < no_states; i++)
    {
        file1.read((char *)&sd, sizeof(sd));
        char state_name[20];

        strcpy(state_name, sd.s_name);
        strcat(state_name, ".txt");

        fstream file2(state_name);
```

```
        st sdd;
        fstream file3("dup3.txt", ios::app);

        while (file2.read((char *)&sdd, sizeof(sdd)))
        {
            if (n == sdd.items.code)
            {
                sdd.items.sr_no = j;
                sdd.items.code = code;

                strcpy(sdd.items.name, name);
                sdd.items.quantity = 0;
                sdd.items.limit = 0;

                file3.write((char *)&sdd, sizeof(sdd));
            }

            else
            {
                sdd.items.sr_no = j;
                file3.write((char *)&sdd, sizeof(sdd));
            }
            j++;
        }

        file2.close();
        file3.close();

        remove(state_name);
        rename("dup3.txt", state_name);
```

```
    }
    file1.close();
  }

  //Option 6
  //Check States
  else if (option == 6)
  {
    st S;
    fstream all_states("states.txt");

    all_states.seekg(0, ios::end);
    int no_states = all_states.tellg() / sizeof(S);
    all_states.seekg(0, ios::beg);

    for (int i = 0; i < no_states; i++)
    {
      // S.sno=i;
      all_states.read((char *)&S, sizeof(S));
      cout << "S No. : " << i + 1 << endl;
      cout << "Name : " << S.s_name << endl;
    }
    all_states.close();
  }

  //Option 7
  //Add Wholesaler
  else if (option == 7)
  {
    wholesaler RT;
```

```
    int n;
    fstream in_file("wholesaler.txt");

    cout << "Number of wholesalers you want to add :- ";
    cin >> n;

    in_file.seekg(0, ios::end);
    int file_size = in_file.tellg();
    int m = file_size / sizeof(RT);

    // in_file.open("wholesaler.txt", ios::app);

    for (int i = 0; i < n; i++)
    {
        cout << "Enter the details of the wholesaler\n";
        cout << "S No. : " << m + 1 << endl;

        cout << "Name : ";
        cin >> RT.name;

        cout << "Rating out of 5 : ";
        cin >> RT.rating;

        cout << "Address : ";
        cin >> RT.address;

        char id[30] = "ID_";
        char pass[30] = "FEASO_";
```

```
        strcat(id, RT.name);
        strcat(pass, RT.name);

        strcpy(RT.r_id, id);
        strcpy(RT.r_pass, pass);
        in_file.write((char *)&RT, sizeof(RT));
        cout << endl
             << endl
             << endl
             << "Wholsaler " << RT.name << " Added With Login ID :- " << id << " and Password "
<< pass << endl
             << endl;

        m++;
      }
      in_file.close();
   }

   //Option 8
   //Check Wholesaler
   else if (option == 8)
   {
      cout << "The wholesalers are\n";

      wholesaler R;
      fstream ret("wholesaler.txt");

      ret.seekg(0, ios::end);
      int no_states = ret.tellg() / sizeof(R);
```

```
    ret.seekg(0, ios::beg);

    for (int i = 0; i < no_states; i++)
    {
        ret.read((char *)&R, sizeof(R));
        cout << "S No. : " << R.items.sr_no << endl;
        cout << "Name : " << R.name << endl;
        cout << "Wholesaler ID : " << R.r_id << endl;
        cout << "Wholesaler address : " << R.address << endl;
        cout << "Wholesaler rating : " << R.rating << endl;
    }
    ret.close();
  }

  //Option 9
  //GOTO Login Page
  else if (option == 9)
  {
    main();

    return 0;
  }

  //Option 10
  //Exit The system
  else if (option == 10)
  {
    system("cls");
    cout << "Thanks For Using";
```

```
        return 0;
    }

    //Defualt Option
    else
    {
        system("cls");
        cout << "Wrong Entry \nTry again!";

        Sleep(2000);
        system("cls");

        admin();
    }
menu2:
    cout << endl
         << endl
         << endl
         << endl
         << "Select The Appropriate option :- " << endl;
    cout << " 1.Back To Menu" << endl
         << " 2.Goto Login Page" << endl
         << " 3.EXIT" << endl
         << endl
         << "ENTER YOUR CHOICE :- ";

    int option2;
    cin >> option2;

    if (option2 == 1)
```

```
    {
        system("cls");
        admin();

        return 0;
    }
    else if (option2 == 2)
    {
        system("cls");
        main();

        return 0;
    }
    else if (option2 == 3)
    {
        system("cls");
        cout << "Thanks For Using";

        return 0;
    }
    else
    {
        system("cls");
        cout << "Wrong Entry \nTry again!";

        Sleep(2000);
        system("cls");

        goto menu2;
    }
```

```
    return 0;
}

//Function For Main Storage
int main_storage()
{
    cout << "Welcome to Main Storage" << endl
         << endl;
    cout << "Please select an appropriate option:-" << endl
         << endl;
    cout << " 1.Display Stocks" << endl
         << " 2.Check Orders" << endl
         << " 3.Place Orders" << endl
         << " 4.Finalise Quotation" << endl
         << " 5.Recieve Order" << endl
         << " 6.Goto Login Page" << endl
         << " 7.Exit" << endl
         << endl
         << "Enter the required option:-";

    int option;

    cin >> option;

    //Option 1
    //Display Stocks
    if (option == 1)
    {
        mainStorage ms;
```

```
    ifstream file2;

    file2.open("main_storage.txt", ios::in);
    file2.seekg(0, ios::end);

    int file_size = file2.tellg();
    int n_items = file_size / sizeof(ms);

    file2.seekg(0, ios::beg);

    for (size_t i = 0; i < n_items; i++)
    {
        file2.read((char *)&ms, sizeof(ms));

        cout << "Sr. No. :- " << ms.items.sr_no << endl;
        cout << "Product Name :- " << ms.items.name << endl;
        cout << "Quantity :- " << ms.items.quantity << endl;
        cout << "Product Code :- " << ms.items.code << endl
             << endl;
    }
    file2.close();
  }

  //Option 2
  //Check Order
  else if (option == 2)
  {
    st S;
    fstream all_states("states.txt");
```

```
    all_states.seekg(0, ios::end);

    int no_states = all_states.tellg() / sizeof(S);

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

    for (int i = 0; i < no_states; i++)
    {
        all_states.read((char *)&S, sizeof(S));
        char state_name[30];

        strcpy(state_name, S.s_name);
        strcat(state_name, ".txt");

        fstream file2(state_name);

        st state1;

        file2.seekg(0, ios::end);
        int file_size = file2.tellg();
        int n_items = file_size / sizeof(state1);

        file2.seekg(0, ios::beg);

        int test = 0;
        fstream file3("oc.txt", ios::app);

        for (int i = 0; i < n_items; i++)
        {
```

```
        file2.read((char *)&state1, sizeof(state1));

        if (state1.o == 1 && test == 0)
        {
            cout << "S No. : " << i + 1 << endl;
            cout << "Name : " << S.s_name << endl;

            test++;
        }

        if (state1.o == 1)
        {
            cout << "Sr. No. :- " << state1.items.sr_no << endl;
            cout << "Product Name :- " << state1.items.name << endl;
            cout << "Quantity :- " << state1.items.order_quantity << endl;

            mainStorage ms;
            fstream fp("main_storage.txt");
            fstream temp("temp.txt", ios::app);

            fp.seekg(0, ios::end);
            int n = fp.tellg() / sizeof(ms);
            fp.seekg(0, ios::beg);

            cout << "Do you want to dispatch this order now? Y/N :- ";
            char C;
            cin >> C;

            if (C == 'Y')
            {
```

```
                for (int i = 0; i < n; i++)
                {
                    fp.read((char *)&ms, sizeof(ms));
                    if (strcmp(state1.items.name, ms.items.name) == 0)
                    {
                        ms.items.quantity = ms.items.quantity - state1.items.order_quantity;
                        cout << "\n\nProduct :- " << state1.items.name << " With Quantity :- " << state1.items.order_quantity << " Dispatched for " << state1.s_name << endl;
                    }
                    temp.write((char *)&ms, sizeof(ms));
                }

                state1.o = 2;
            }
            fp.close();
            temp.close();

            remove("main_storage.txt");
            rename("temp.txt", "main_storage.txt");
        }

        file3.write((char *)&state1, sizeof(state1));
    }
    file2.close();
    file3.close();

    remove(state_name);
    rename("oc.txt", state_name);
  }
  all_states.close();
```

```
    }

    //Option 3
    //Place Order
    else if (option == 3)
    {
        mainStorage ms;
        ifstream file2;

        file2.open("main_storage.txt", ios::in);
        file2.seekg(0, ios::end);
        int file_size = file2.tellg();
        int n_items = file_size / sizeof(ms);

        file2.seekg(0, ios::beg);

        for (size_t i = 0; i < n_items; i++)
        {
            file2.read((char *)&ms, sizeof(ms));
            cout << "Sr. No. :- " << ms.items.sr_no << endl;
            cout << "Product Name :- " << ms.items.name << endl;
            cout << "Product Code :- " << ms.items.code << endl
                 << endl;
        }
        cout << "Enter number of items to be ordered :- ";
        int n;
        cin >> n;
        for (int i = 0; i < n; i++)
        {
            if (n_items == 0)
```

```
        {
            cout << "no items present";
            break;
        }

        int p_code;
        cout << "enter product code of the product:- ";
        cin >> p_code;

        order test;
        fstream file3("order.txt");

        file3.seekg(0, ios ::end);
        int k = file3.tellg() / sizeof(test);
        file3.close();

        file2.seekg(0, ios::beg);

        for (int j = 0; j < n_items; j++)
        {
            file2.read((char *)&ms, sizeof(ms));
            if (p_code == ms.items.code)
            {
                order odr;
                strcpy(odr.name, ms.items.name);
                cout << "enter Quantity :- ";

                int quantity;
                cin >> quantity;
```

```
                odr.quantity = quantity;
                odr.sr_no = k + 1;

                fstream file3("order.txt", ios::app);
                file3.write((char *)&odr, sizeof(odr));
                file3.close();

                k++;

                cout << "\n\n        Your Order has been succesfully placed\n";
            }
        }
    }

    file2.close();
  }

  //Option 4
  //Finalize Quatation
  else if (option == 4)
  {
    wholesaler rt;

    fstream file1("application_from_retailor.txt");

    file1.seekg(0, ios::end);
    int no_of_bids = file1.tellg() / sizeof(rt);
    file1.seekg(0, ios::beg);

    fstream file2("order.txt");
```

```
    order odr;

    file2.seekg(0, ios::end);
    int file_size = file2.tellg();
    int n_items = file_size / sizeof(odr);

    file2.seekg(0, ios::beg);

    cout << "Ref. No."
         << "    "
         << "Name" << endl;

    for (int i = 1; i <= n_items; i++)
    {
        file2.read((char *)&odr, sizeof(odr));

        cout << odr.sr_no << ".    " << odr.name << endl;
    }

    int n;

    cout << "Enter number of items :- ";
    cin >> n;

    for (int k = 0; k < n; k++)
    {

        cout << "Enter the Ref. No. of the item for which you want to Check the quotation :- ";
        int s_no;
        cin >> s_no;
```

```
        cout
            << "Id of Wholesaler"
            << "    "
            << "Item Name"
            << "    "
            << "Total Price" << endl;

        file1.seekg(0, ios::beg);

        for (int i = 0; i < no_of_bids; i++)
        {
            file1.read((char *)&rt, sizeof(rt));

            if (rt.items.sr_no == s_no)
            {
                cout << rt.r_id << "     " << rt.items.name << "    " << rt.price << endl;
            }
        }
    }
    file2.close();
    file1.close();

    cout << "YOU Want to finalise a quotation ?"
         << "Enter Y for yes and N for no :- ";

    char a;
    cin >> a;

    if (a == 'Y')
```

```
    {
        cout << "Enter the number of items you want to finalise :- ";

        int z;
        cin >> z;

        for (int i = 0; i < z; i++)
        {
            fstream file1("application_from_retailor.txt");
            fstream file2("order.txt");

            cout << "Enter the Ref. No. of the item you want to finalise :- ";

            int s1_no;
            cin >> s1_no;

            cout << "Enter the retailor ID you want to finalise :- ";

            char rid[30];
            cin >> rid;

            file1.seekg(0, ios::beg);

            cout << endl
                 << endl
                 << "Quotation is finalised successfully." << endl;

            fstream temp1("temp1.txt", ios::app);
            fstream temp2("temp2.txt", ios::app);
```

```
        for (int l = 0; l < no_of_bids; l++)
        {
            file1.read((char *)&rt, sizeof(rt));
            if (s1_no == rt.items.sr_no && strcmp(rid, rt.r_id) == 0)
            {
                fstream file3("status.txt", ios::app);

                file3.write((char *)&rt, sizeof(rt));
                file3.close();
            }
            if (s1_no != rt.items.sr_no)
            {
                temp1.write((char *)&rt, sizeof(rt));
            }
        }

        file2.seekg(0, ios::beg);
        for (int l = 0; l < n_items; l++)
        {
            file2.read((char *)&odr, sizeof(odr));
            if (odr.sr_no != s1_no)
            {
                temp2.write((char *)&odr, sizeof(odr));
            }
        }

        temp1.close();
        temp2.close();

        file2.close();
```

```
            file1.close();

            remove("application_from_retailor.txt");
            rename("temp1.txt", "application_from_retailor.txt");

            remove("order.txt");
            rename("temp2.txt", "order.txt");
        }
    }
  }

  //Option 5
  //Receive Order
  else if (option == 5)
  {
    fstream file1("status.txt");
    wholesaler rt;

    file1.seekg(0, ios::end);
    int n_o = file1.tellg() / sizeof(rt);
    file1.seekg(0, ios::beg);

    if (n_o != 0)
    {
        cout << setw(4) << "Sr.No." << setw(10) << "Retailor Id" << setw(20) << "Name of
product" << setw(30) << "Quantity of Product" << endl;
    }
    else
    {
        cout << "NO items to recieve";
```

```
        Sleep(1500);
        system("cls");

        main_storage();
        exit(0);
    }

    for (int i = 0; i < n_o; i++)
    {
        file1.read((char *)&rt, sizeof(rt));

        if (rt.cofirmation == 1)
        {
            cout << setw(4) << i + 1 << setw(10) << rt.r_id << setw(20) << rt.items.name <<
setw(30) << rt.items.quantity << endl;
        }
    }

    file1.close();

    cout << "You want to recieve any order ? Enter Y for yes and N for No :- ";

    char a;
    cin >> a;

    if (a == 'N')
    {
        main_storage();
        exit(0);
```

```
    }

    for (int i = 0; i < n_o; i++)
    {
        cout << "Enter number of orders you want to recieve :- ";

        int orders;
        cin >> orders;

        for (int j = 0; j < orders; j++)
        {
            fstream file1("status.txt");
            fstream temp1("temp1.txt", ios::app);

            cout << "Enter the serial number of order you want to recieve :- ";

            int sno;
            cin >> sno;

            file1.read((char *)&rt, sizeof(rt));

            if (sno == j + 1)
            {
                mainStorage ms;
                fstream file2("main_storage.txt");

                file2.seekg(0, ios::end);
                int size_ms = file2.tellg() / sizeof(ms);
                file2.seekg(0, ios::beg);
```

```
            fstream temp2("temp2.txt", ios::app);

            for (int k = 0; k < size_ms; k++)
            {
                file2.read((char *)&ms, sizeof(ms));

                if (strcmp(rt.items.name, ms.items.name) == 0)
                {
                    ms.items.quantity = ms.items.quantity + rt.items.quantity;

                    cout << "\n\n Ordered recieved successfully\n";
                }
                temp2.write((char *)&ms, sizeof(ms));
            }
            file2.close();
            temp2.close();

            remove("main_storage.txt");
            rename("temp2.txt", "main_storage.txt");
        }
        else
        {
            temp1.write((char *)&rt, sizeof(rt));
        }

        file1.close();
        temp1.close();

        remove("status.txt");
        rename("temp1.txt", "status.txt");
```

```
        }
    }
  }

  //Option 6
  //GOTO Login Page
  else if (option == 6)
  {

    system("cls");
    main();
    return 0;
  }

  //Option 7
  //Exit
  else if (option == 7)
  {
    system("cls");
    cout << "Thanks For Using";
    return 0;
  }

  //Default Option
  else
  {
    system("cls");
    cout << "Wrong Entry" << endl
         << "Try again!";
```

```
        Sleep(2000);
        system("cls");

        main_storage();

        return 0;
    }

menu2:
    cout << endl
         << endl
         << endl
         << endl
         << "Select The Appropriate option :- " << endl;
    cout << " 1.Back To Menu" << endl
         << " 2.Goto Login Page" << endl
         << " 3.EXIT" << endl
         << endl
         << "ENTER YOUR CHOICE :- ";

    int option2;
    cin >> option2;

    if (option2 == 1)
    {
        system("cls");

        main_storage();
        return 0;
    }
```

```
    else if (option2 == 2)
    {
        system("cls");

        main();
        return 0;
    }
    else if (option2 == 3)
    {
        system("cls");

        cout << "Thanks For Using";
        return 0;
    }
    else
    {
        system("cls");

        cout << "Wrong Entry" << endl
             << "Try again!";
        Sleep(2000);

        system("cls");

        goto menu2;
    }

    return 0;
}
```

```
//Function For State
int state(char *state)
{

menu:
   st state1;
   char state_name[30];

   strcpy(state_name, state);
   char s_name[20];
   char s1_name[20];

   strcpy(s_name, state_name);
   strcpy(s1_name, state_name);

   cout << "Welcome to " << state_name << " Storage " << endl
        << endl;
   cout << "Please select an appropriate option:-" << endl
        << endl;
   cout << " 1.Display Stocks" << endl
        << " 2.Check Orders" << endl
        << " 3.Place Orders" << endl
        << " 4.Recieve Order" << endl
        << " 5.Add Hospital" << endl
        << " 6.Display Hospital" << endl
        << " 7.Goto Login Page" << endl
        << " 8.EXIT" << endl
        << endl
        << "Enter the required option:-";
```

```
    strcat(state_name, ".txt");

    int option;
    cin >> option;

    //Option 1
    //Display Stocks
    if (option == 1)
    {

        fstream file2(state_name);
        file2.seekg(0, ios::end);
        int file_size = file2.tellg();
        int n_items = file_size / sizeof(state1);

        file2.seekg(0, ios::beg);

        for (int i = 0; i < n_items; i++)
        {
            file2.read((char *)&state1, sizeof(state1));
            cout << "Sr. No. :- " << state1.items.sr_no << endl;
            cout << "Product Name :- " << state1.items.name << endl;
            cout << "Quantity :- " << state1.items.quantity << endl;
            cout << "Product Code :- " << state1.items.code << endl
                 << endl;
        }
        file2.close();
    }

    //Option 2
```

```
  //Check Order
  else if (option == 2)
  {
      hos h1, h2;
      fstream file11("order_h.txt");

      file11.seekg(0, ios::end);
      int n_o = file11.tellg() / sizeof(h1);

      file11.seekg(0, ios::beg);

      cout << "Enter the region for which you want to check the order :- ";

      char r_name[30];
      cin >> r_name;

      fstream fp("temp_h.txt");
      fp.seekg(0, ios::end);
      int n_i = fp.tellg() / sizeof(h2);
      fp.seekg(0, ios::beg);

      int order[n_i];
      for (int i = 0; i < n_i; i++)
      {
          order[i] = 0;
      }

      for (int i = 0; i < n_o; i++)
      {
          file11.read((char *)&h1, sizeof(h1));
```

```
        if (strcmp(s_name, h1.s_name) == 0 && strcmp(r_name, h1.r_name) == 0 && h1.o == 0)
        {
            fp.seekg(0, ios::beg);
            for (int j = 0; j < n_i; j++)
            {

                fp.read((char *)&h2, sizeof(h2));
                if (strcmp(h1.items.name, h2.items.name) == 0)
                {
                    order[h2.items.sr_no - 1] = order[h2.items.sr_no - 1] + h1.items.order_quantity;
                    break;
                }
            }
        }
    }
    for (int i = 0; i < n_i; i++)
    {
        if (order[i] == 0)
        {
            continue;
        }
        fp.seekg(0, ios::beg);
        for (int j = 0; j < n_i; j++)
        {
            fp.read((char *)&h2, sizeof(h2));
            if (h2.items.sr_no == i + 1)
            {
                cout << "Product Name :- " << h2.items.name << endl;
```

```
                cout << "Quantity :- " << order[i] << endl
                    << endl;
            }
        }
    }
    file11.close();

    cout << "Do you want to dispatch any order ? Y/N :- ";

    char c;
    cin >> c;

    if (c == 'Y')
    {

        cout << "How many orders you want to Dispatch :- ";

        int n;
        cin >> n;

        for (int i = 0; i < n; i++)
        {
            file11.seekg(0, ios::beg);

            cout << "Enter the name of the product you want to dispatch :- ";

            char i_name[20];
            cin >> i_name;

            st st1;
```

```
        fstream store(state_name);
        fstream temp("temp.txt", ios::app);

        store.seekg(0, ios::end);
        int size = store.tellg() / sizeof(st1);
        store.seekg(0, ios::beg);

        for (int j = 0; j < size; j++)
        {
            store.read((char *)&st1, sizeof(st1));
            if (strcmp(st1.items.name, i_name) == 0)
            {
                st1.items.quantity = st1.items.quantity - order[st1.items.sr_no - 1];
                cout << "\n\n\nProduct :-" << st1.items.name << " with quantity :- " <<
order[st1.items.sr_no - 1] << " Dispatched" << endl;
            }
            temp.write((char *)&st1, sizeof(st1));
        }

        store.close();
        temp.close();

        remove(state_name);
        rename("temp.txt", state_name);

        fstream file("order_h.txt");
        fstream temp2("temp2.txt", ios::app);

        for (int i = 0; i < n_o; i++)
        {
```

```
            file.read((char *)&h1, sizeof(h1));
            if (strcmp(s_name, h1.s_name) == 0 && strcmp(r_name, h1.r_name) == 0)
            {

              if (strcmp(h1.items.name, i_name) == 0)
            {
                h1.o = 1;
            }
            }
            temp2.write((char *)&h1, sizeof(h1));
        }
        file.close();
        temp2.close();

        remove("order_h.txt");
        rename("temp2.txt", "order_h.txt");
      }
    }
  }

  //Option 3
  //Place Order
  else if (option == 3)
  {
    st ss;
    ifstream file2;

    file2.open(state_name, ios::in);
    file2.seekg(0, ios::end);
```

```
    int file_size = file2.tellg();
    int n_items = file_size / sizeof(ss);
    file2.seekg(0, ios::beg);

    int items = 0;

    for (size_t i = 0; i < n_items; i++)
    {
        if (ss.o == 0)
        {

            file2.read((char *)&ss, sizeof(ss));
            cout << "Sr. No. :- " << ss.items.sr_no << endl;
            cout << "Product Name :- " << ss.items.name << endl;
            cout << "Product Code :- " << ss.items.code << endl
                 << endl;

            items++;
        }
    }
    file2.close();
    if (items > 0)
    {
        cout << "Enter number of items to be ordered :- ";

        int n;
        cin >> n;

        for (int i = 0; i < n; i++)
        {
```

```
        fstream file2(state_name);
        if (n_items == 0)
        {
            cout << "no items present";
            break;
        }

        int p_code;
        cout << "enter product code of the product:- ";

        cin >> p_code;

        fstream file3("s1.txt", ios::app);

        file2.seekg(0, ios::beg);
        for (int j = 0; j < n_items; j++)
        {
            file2.read((char *)&ss, sizeof(ss));
            if (p_code == ss.items.code)
            {
                cout << "enter Quantity :- ";

                int quantity;
                cin >> quantity;

                ss.items.order_quantity = quantity;
                ss.o = 1;

                cout << "\n\n          Order Placed Successfully";
            }
```

```
                file3.write((char *)&ss, sizeof(ss));
            }
            file3.close();
            file2.close();

            remove(state_name);
            rename("s1.txt", state_name);
        }
    }
  }

  //Option 4
  //Receive Order
  else if (option == 4)
  {
    fstream file2(state_name);

    st state1;

    file2.seekg(0, ios::end);
    int file_size = file2.tellg();
    int n_items = file_size / sizeof(state1);

    file2.seekg(0, ios::beg);
    fstream file3("oc.txt", ios::app);

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

        file2.read((char *)&state1, sizeof(state1));
```

```
        if (state1.o == 2)
        {
            cout << state1.items.sr_no << endl;
            cout << state1.items.name << endl;
            cout << state1.items.order_quantity << endl;

            cout << "Do you want to Recieve this order now? Y/N :- ";

            char C;
            cin >> C;

            if (C == 'Y')
            {
                state1.o = 0;
                state1.items.quantity = state1.items.quantity + state1.items.order_quantity;
                state1.items.order_quantity = 0;

                cout << "\n\n\n          Order Recieved Successfully\n";
            }
        }

        file3.write((char *)&state1, sizeof(state1));
    }
    file2.close();
    file3.close();

    remove(state_name);
    rename("oc.txt", state_name);
  }
```

```
   //Option 5
   //Add Hospital
   else if (option == 5)
   {
      hos h;
      fstream fp2("hospitals.txt");

      fp2.seekg(0, ios::end);
      int n = fp2.tellg() / sizeof(h);
      fp2.seekg(0, ios::beg);

      int q[4] = {0, 0, 0, 0};

      for (int i = 0; i < n; i++)
      {
         fp2.read((char *)&h, sizeof(h));

         if (strcmp(h.r_name, "North") == 0)
         {
            q[0]++;
         }
         if (strcmp(h.r_name, "South") == 0)
         {
            q[1]++;
         }
         if (strcmp(h.r_name, "East") == 0)
         {
            q[2]++;
         }
```

```
        if (strcmp(h.r_name, "West") == 0)
        {
            q[3]++;
        }
    }

    fp2.close();

    fstream fp1("hospitals.txt", ios::app);

    cout << " 1. North \n 2. South \n 3. East \n 4. West \n ";

  restart:

    cout << "Slect the region of hospitals you want to add :- ";

    int r;
    cin >> r;

    char r_n[4];

    if (r == 1)
    {
        strcpy(h.r_name, "North");
        strcpy(r_n, "-N-");
    }
    else if (r == 2)
    {
        strcpy(h.r_name, "South");
        strcpy(r_n, "-S-");
```

```
    }
    else if (r == 3)
    {
        strcpy(h.r_name, "East");
        strcpy(r_n, "-E-");
    }
    else if (r == 4)
    {
        strcpy(h.r_name, "West");
        strcpy(r_n, "-W-");
    }
    else
    {
        cout << "Wrong input Try again.";

        goto restart;
    }

    cout << "Enter number of hospitals you want to add in above mentioned region :- ";

    int n_hos;
    cin >> n_hos;

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

        cout << "Sr. no :- " << q[r - 1] + 1 << endl;
        cout << "Hospital Name :- ";

        cin >> h.h_name;
```

```
        int a = q[r - 1] + 1;

        stringstream w;
        w << a;
        char x[10];
        w >> x;

        char str[20];
        strcpy(str, s1_name);
        strcat(str, r_n);
        strcat(str, x);

        strcpy(h.h_id, str);

        q[r - 1]++;

        strcpy(h.s_name, s_name);
        char pass[30] = "FEASO_";
        strcat(pass, h.h_name);
        strcpy(h.h_pass, pass);

        fp1.write((char *)&h, sizeof(h));

        char f_name[20];

        strcpy(f_name, h.h_name);
        strcat(f_name, ".txt");

        ofstream S1(f_name);
        fstream temp_h("temp_h.txt");
```

```
        if (temp_h && S1)
        {
            string line;
            while (getline(temp_h, line))
            {
                S1 << line;
            }

            S1.close();
            temp_h.close();
        }

        cout << "\n\n\nYour Id Generated for hospital " << h.h_name << " is :- " << h.h_id << endl;
        cout << "Password :- " << h.h_pass << endl;
      }
   }

   //Option 6
   //Display Hospital
   else if (option == 6)
   {
      fstream fp1(s_name);
      hos h;

      fp1.seekg(0, ios::end);
      int n = fp1.tellg() / sizeof(h);
      fp1.seekg(0, ios::beg);
```

```
    int q = 1;

    // stringstream w;
    // w >> q;
    // char x[10];
    // w << x;

    // char str[20];
    // strcpy(str, s_name);
    // strcat(str, "0N");
    // strcat(str, x);

    cout << "North \n";

    for (int i = 0; i < n; i++)
    {
        fp1.read((char *)&h, sizeof(h));

        if (strcmp(h.r_name, "North") == 0)
        {

            cout << "Sr. no :- " << q << endl;
            cout << "Hospital Name :- ";
            cout << h.h_name << "  " << h.h_id << endl;
            q++;
        }
        if (i == n - 1 && q == 1)
        {
            cout << "No Hospitals\n";
        }
```

```
    }

    fp1.seekg(0, ios::beg);

    q = 1;

    cout << "South \n";

    for (int i = 0; i < n; i++)
    {
        fp1.read((char *)&h, sizeof(h));

        if (strcmp(h.r_name, "South") == 0)
        {

            cout << "Sr. no :- " << q << endl;
            cout << "Hospital Name :- ";
            cout << h.h_name << endl;
            q++;
        }
        if (i == n - 1 && q == 1)
        {
            cout << "No Hospitals\n";
        }
    }

    fp1.seekg(0, ios::beg);

    q = 1;
```

```
    cout << "East \n";

    for (int i = 0; i < n; i++)
    {
        fp1.read((char *)&h, sizeof(h));

        if (strcmp(h.r_name, "East") == 0)
        {

            cout << "Sr. no :- " << q << endl;
            cout << "Hospital Name :- ";
            cout << h.h_name << endl;
            q++;
        }
        if (i == n - 1 && q == 1)
        {
            cout << "No Hospitals\n";
        }
    }

    fp1.seekg(0, ios::beg);

    q = 1;

    cout << "West \n";

    for (int i = 0; i < n; i++)
    {
        fp1.read((char *)&h, sizeof(h));
```

```
        if (strcmp(h.r_name, "West") == 0)
        {

            cout << "Sr. no :- " << q << endl;
            cout << "Hospital Name :- ";
            cout << h.h_name << endl;

            q++;
        }
        if (i == n - 1 && q == 1)
        {
            cout << "No Hospitals\n";
        }
    }

    fp1.close();
  }

  //Option 7
  //GOTO Login page
  else if (option == 7)
  {

    system("cls");
    main();

    return 0;
  }

  //Option 8
```

```
    //Exit
    else if (option == 8)
    {
        system("cls");
        cout << "Thanks For Using";

        return 0;
    }

    //Default Option
    else
    {
        system("cls");

        cout << "Wrong Entry \nTry again!";
        Sleep(2000);

        system("cls");

        goto menu;
    }

menu2:
    cout << endl
         << endl
         << endl
         << endl
         << "Select The Appropriate option :-" << endl;
    cout << " 1.Back To Menu" << endl
         << " 2.Goto Login Page" << endl
```

```
        << " 3.EXIT" << endl
        << endl
        << "ENTER YOUR CHOICE :- ";

    int option2;
    cin >> option2;

    if (option2 == 1)
    {
        system("cls");
        goto menu;

        return 0;
    }
    else if (option2 == 2)
    {

        system("cls");
        main();

        return 0;
    }
    else if (option2 == 3)
    {
        system("cls");
        cout << "Thanks For Using";

        return 0;
    }
    else
```

```
    {
        system("cls");
        cout << "Wrong Entry \nTry again!";

        Sleep(2000);

        system("cls");
        goto menu2;
    }
    return 0;
}

//Function for Region
int region()
{
menu:

    fstream file("hospitals.txt");
    hos h;

    file.seekg(0, ios::end);
    int n = file.tellg() / sizeof(h);
    file.seekg(0, ios::beg);

    cout << "Enter the State Name:- ";
    char state[30];
    cin >> state;

    int k = 1;
```

```
   cout << "\n\nNorth Region:-\n";

   for (int i = 0; i < n; i++)
   {
      file.read((char *)&h, sizeof(h));

      if (strcmp(state, h.s_name) == 0 && strcmp("North", h.r_name) == 0)
      {
         cout << k << ".   " << h.h_name << endl;
         k++;
      }
   }
   if (k == 1)
   {
      cout << " No Hospitals";
   }

   cout << "\n\nSouth Region:-\n";

   k = 1;

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

   for (int i = 0; i < n; i++)
   {
      file.read((char *)&h, sizeof(h));

      if (strcmp(state, h.s_name) == 0 && strcmp("South", h.r_name) == 0)
      {
         cout << k << ".   " << h.h_name << endl;
```

```
            k++;
        }
    }
    if (k == 1)
    {
        cout << " No Hospitals";
    }
    cout << "\n\nEast Region:-\n";

    k = 1;

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

    for (int i = 0; i < n; i++)
    {
        file.read((char *)&h, sizeof(h));

        if (strcmp(state, h.s_name) == 0 && strcmp("East", h.r_name) == 0)
        {
            cout << k << ".   " << h.h_name << endl;
            k++;
        }
    }
    if (k == 1)
    {
        cout << " No Hospitals";
    }

    cout << "\n\nWest Region:-\n";
```

```
   k = 1;

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

   for (int i = 0; i < n; i++)
   {
      file.read((char *)&h, sizeof(h));
      if (strcmp(state, h.s_name) == 0 && strcmp("West", h.r_name) == 0)
      {
         cout << k << ".   " << h.h_name << endl;
         k++;
      }
   }
   if (k == 1)
   {
      cout << " No Hospitals";
   }

menu2:
   cout << endl
        << endl
        << endl
        << endl
        << "Select The Appropriate option :- " << endl;
   cout << " 1.Back To Menu" << endl
        << " 2.Goto Login Page" << endl
        << " 3.EXIT" << endl
        << endl
        << "ENTER YOUR CHOICE :- ";
```

```
    int option2;
    cin >> option2;

    if (option2 == 1)
    {
        system("cls");
        goto menu;

        return 0;
    }
    else if (option2 == 2)
    {
        system("cls");
        main();

        return 0;
    }
    else if (option2 == 3)
    {
        system("cls");
        cout << "Thanks For Using";

        return 0;
    }
    else
    {
        system("cls");
        cout << "Wrong Entry \nTry again!";

        Sleep(2000);
```

```
        system("cls");

        goto menu2;
    }
}

//Function for Hospital
int hospital(char *ID)
{
menu:

    int keydec = 0;
    hos current_hos;

    char id[20];
    char name[20];
    strcpy(id, ID);

    int k = 0;

    fstream file("hospitals.txt");

    for (int i = 0; !file.eof(); i++)
    {
        file.read((char *)&current_hos, sizeof(current_hos));
        if (strcmp(current_hos.h_id, id) == 0)
        {
            k = 1;
            break;
        }
```

```
    }
    if (k == 0)
    {
        return 0;
    }

    cout << "Welcome to " << current_hos.h_name << " Hospital" << endl
         << endl
         << endl;
    strcpy(name, current_hos.h_name);
    strcat(name, ".txt");

    cout << "Select an appropriate option\n\n\n";
    cout << " 1.Display Stocks" << endl
         << " 2.Place Order" << endl
         << " 3.Recieve Order " << endl
         << " 4.Goto Login Page" << endl
         << " 5.EXIT" << endl
         << endl
         << "Enter the required option:- ";

    int option;
    cin >> option;

    //Option 1
    //Display Stocks
    if (option == 1)
    {
        hos h;
        fstream file1(name);
```

```
        file1.seekg(0, ios::end);
        int n_i = file1.tellg() / sizeof(h);
        file1.seekg(0, ios::beg);

        for (int i = 0; i < n_i; i++)
        {
            if (keydec == 0)
            {
                cout << left
                     << setw(10) << "Ref. No."
                     << "|" << left << setw(25) << "Product Name"
                     << "|" << left << setw(15) << "Quantity"
                     << "|"
                     << "\n";
                cout << "----------|-------------------------|---------------|";
                cout << "\n";
            }
            keydec++;

            file1.read((char *)&h, sizeof(h));

            cout << left
                 << setw(10) << h.items.sr_no << "|" << left << setw(25) << h.items.name << "|" <<
left << setw(15) << h.items.quantity << "|"
                 << "\n";
        }
    }

    //Option2
```

```
   //Place Order
   else if (option == 2)
   {
      hos h;
      fstream file1(name);

      file1.seekg(0, ios::end);
      int n_i = file1.tellg() / sizeof(h);
      file1.seekg(0, ios::beg);

      for (int i = 0; i < n_i; i++)
      {
         if (keydec == 0)
         {
            cout << left
                 << setw(10) << "Ref. No."
                 << "|" << left << setw(25) << "Product Name"
                 << "|" << left << setw(15) << "Quantity"
                 << "|"
                 << "\n";
            cout << "----------|-------------------------|---------------|";
            cout << "\n";
         }
         keydec++;
         file1.read((char *)&h, sizeof(h));
         cout << left
              << setw(10) << h.items.sr_no << "|" << left << setw(25) << h.items.name << "|" <<
left << setw(15) << h.items.quantity << "|"
              << "\n";
      }
```

```
    fstream file3("order_h.txt", ios::app);
    int n;

    cout << "Enter number of items to be ordered :- ";
    cin >> n;

    for (int i = 0; i < n; i++)
    {
        cout << "Enter the refrence number of product :- ";

        int x;
        cin >> x;

        file1.seekg(0, ios::beg);

        for (int j = 0; j < n_i; j++)
        {
            file1.read((char *)&h, sizeof(h));
            if (x == h.items.sr_no)
            {
                cout << "Product Name :- " << h.items.name << endl;

                cout << "Enter quantity :- ";
                cin >> h.items.order_quantity;

                strcpy(h.s_name, current_hos.s_name);
                strcpy(h.r_name, current_hos.r_name);

                file3.write((char *)&h, sizeof(h));
```

```
                cout << "\n\n\n                Order Placed Successfully\n";
            }
        }
    }

    file3.close();
    file1.close();
  }

  //Option 3
  //Receive Order
  else if (option == 3)
  {
    hos h;
    fstream file4("order_h.txt");

    file4.seekg(0, ios::end);
    int n_o = file4.tellg() / sizeof(current_hos);
    file4.seekg(0, ios::beg);

    fstream temp2("temp2.txt", ios::app);

    for (int i = 0; i < n_o; i++)
    {
        file4.read((char *)&h, sizeof(h));
        if (strcmp(current_hos.s_name, h.s_name) == 0 && strcmp(current_hos.r_name,
h.r_name) == 0 && h.o == 1 && strcmp(current_hos.h_name, h.h_name) == 0)
        {
            cout << h.items.name << "    " << h.items.order_quantity << endl;
```

```
        cout << "Do you want to recieve this order ? Y/N :- ";

        char c;
        cin >> c;

        if (c == 'Y')
        {
            hos h1;

            fstream s(name);
            fstream temp1("temp1.txt", ios::app);

            s.seekg(0, ios::end);
            int n_i = s.tellg() / sizeof(h1);
            s.seekg(0, ios::beg);

            for (int j = 0; j < n_i; j++)
            {
                s.read((char *)&h1, sizeof(h1));
                if (strcmp(h1.items.name, h.items.name) == 0)
                {
                    h1.items.quantity = h1.items.quantity + h.items.order_quantity;

                    cout << endl
                         << endl
                         << endl
                         << "Order Recieved Successfully" << endl;
                }
                temp1.write((char *)&h1, sizeof(h1));
```

```
                }

                temp1.close();
                s.close();

                remove(name);
                rename("temp1.txt", name);

                continue;
            }
        }
        temp2.write((char *)&h, sizeof(h));
    }
    temp2.close();
    file4.close();

    remove("order_h.txt");
    rename("temp2.txt", "order_h.txt");
  }

  //Option 4
  //GOTO Login Page
  else if (option == 4)
  {
    system("cls");
    main();

    return 0;
  }
  else if (option == 3)
```

```
    {
        system("cls");
        cout << "Thanks For Using";

        return 0;
    }
    else
    {
        system("cls");
        cout << "Wrong Entry \nTry again!";

        Sleep(2000);
        system("cls");

        goto menu;
    }

menu2:
    cout << endl
         << endl
         << endl
         << "Select The Appropriate option :- " << endl;
    cout << " 1.Back To Menu" << endl
         << " 2.Goto Login Page" << endl
         << " 3.EXIT" << endl
         << endl
         << "ENTER YOUR CHOICE :- ";

    int option2;
```

```
    cin >> option2;

    if (option2 == 1)
    {
        system("cls");
        goto menu;

        return 0;
    }
    else if (option2 == 2)
    {

        system("cls");
        main();

        return 0;
    }
    else if (option2 == 3)
    {
        system("cls");
        cout << "Thanks For Using";

        return 0;
    }
    else
    {
        system("cls");
        cout << "Wrong Entry \nTry again!";

        Sleep(2000);
```

```
        system("cls");

        goto menu2;
    }
}

//Function for Wholesaler
void w_saler(char *name, char *id, int rating)
{
menu:

    char sr_no[30];
    strcpy(sr_no, id);

    system("cls");

    int option;
    cout << endl
         << "Welcome " << name << " to quotation portal" << endl;
    cout << "Your Rating is :- " << rating << endl;
    cout << "Select an appropriate option" << endl
         << endl
         << endl;
    cout << " 1.To add your quotation" << endl
         << " 2.Status of quotation" << endl
         << " 3.Dispatch Order" << endl
         << " 4.Goto Login Page" << endl
         << " 5.EXIT" << endl
         << endl
         << "Enter the required option:- ";
```

```
    cin >> option;

    //Option 1
    //Add Quotation
    if (option == 1)
    {
        fstream file1("order.txt");
        order odr;

        file1.seekg(0, ios::end);
        int file_size = file1.tellg();
        int n_items = file_size / sizeof(odr);

        file1.seekg(0, ios::beg);

        cout << "Sr. No."
             << "    "
             << "Name"
             << "    "
             << "Quantity" << endl;

        for (int i = 1; i <= n_items; i++)
        {
            file1.read((char *)&odr, sizeof(odr));
            cout << i << ".    " << odr.name << "    " << odr.quantity << endl;
        }

        cout << "If you can fullfill all the order then only fill the form!!!" << endl;

        cout << "Enter the number of items you can supply :- ";
```

```
    int n;
    cin >> n;

    for (int i = 0; i < n; i++)
    {
        cout << "Enter the serial number of product :- ";

        int a;
        cin >> a;

        file1.seekg(0, ios::beg);

        for (int j = 1; j <= n_items; j++)
        {
            file1.read((char *)&odr, sizeof(odr));

            if (a == j)
            {
                wholesaler rt;

                cout << "product :- " << odr.name << endl;

                strcpy(rt.items.name, odr.name);
                // cout << "enter quantity :- ";
                // cin >> rt.items.quantity;

                cout << "enter price of one piece :- ";
                int price_of_one;
                cin >> price_of_one;
```

```
                int price = price_of_one * odr.quantity;

                cout << "Percentage discount you will give :- ";
                int discount;
                cin >> discount;
                price = price - (price * discount / 100);
                cout << "Total :- " << price << endl;
                rt.price = price;

                strcpy(rt.r_id, sr_no);
                rt.items.sr_no = odr.sr_no;
                rt.items.quantity = odr.quantity;

                fstream file2("application_from_retailor.txt", ios ::app);

                file2.write((char *)&rt, sizeof(rt));
                file2.close();

                cout << "\n\n\nQuotation Added Successfully\n";
            }
        }
    }

    file1.close();
  }

  //Option 2
  //Status Of Quotation
  else if (option == 2)
  {
```

```
    wholesaler rt;
    fstream file1("status.txt");

    int count = 0;

    file1.seekg(0, ios::end);
    int n = file1.tellg() / sizeof(rt);
    file1.seekg(0, ios::beg);

    for (int i = 1; i <= n; i++)
    {
        file1.read((char *)&rt, sizeof(rt));
        if (strcmp(sr_no, rt.r_id) == 0 && count == 0 && rt.cofirmation == 0)
        {
            cout << "your quotation for following items is selected :- " << endl
                 << endl;
            cout << "SR. NO.      NAME        Quantity" << endl;
        }

        if (strcmp(sr_no, rt.r_id) == 0 && rt.cofirmation == 0)
        {
            cout << i << "     " << rt.items.name << "      " << rt.items.quantity << endl;
            count++;
        }
    }

    if (count == 0)
    {
        cout << endl
             << "No order is pending";
```

```
    }
    file1.close();
  }

  //Option 3
  //Dispatch Order
  else if (option == 3)
  {
    wholesaler rt;
    fstream file1("status.txt");

    int count = 0;

    file1.seekg(0, ios::end);
    int n = file1.tellg() / sizeof(rt);

    file1.seekg(0, ios::beg);

    for (int i = 1; i <= n; i++)
    {
      file1.read((char *)&rt, sizeof(rt));
      if (strcmp(sr_no, rt.r_id) == 0 && count == 0 && rt.cofirmation == 0)
      {
        cout << "your quotation for following items is selected :- " << endl
          << endl;
        cout << "SR. NO.      NAME       Quantity" << endl;
      }

      if (strcmp(sr_no, rt.r_id) == 0 && rt.cofirmation == 0)
      {
```

```
            cout << i << "     " << rt.items.name << "      " << rt.items.quantity << endl;
            count++;
        }
    }

    if (count == 0)
    {
        cout << "No Order to Dispatch";
        file1.close();
        Sleep(1500);
        goto menu;
    }

    cout << "Enter the number of orders you want to dispatch :- ";

    int q;
    cin >> q;

    fstream temp("temp.txt", ios::app);
    file1.seekg(0, ios::beg);

    for (int i = 0; i < q; i++)
    {
        file1.read((char *)&rt, sizeof(rt));
        cout << "Enter the Sr. No. of the order you want to dispatch :- ";

        int s_no;
        cin >> s_no;

        for (int j = 1; j <= n; j++)
```

```
        {
            if (strcmp(sr_no, rt.r_id) == 0 && rt.cofirmation == 0 && s_no == j)
            {
                cout << "\n\n\nProduct :-" << rt.items.name << " with quantity :- " <<
rt.items.quantity << " Dispatched" << endl;

                rt.cofirmation = 1;
            }
        }

        temp.write((char *)&rt, sizeof(rt));
    }

    file1.close();
    temp.close();

    remove("status.txt");
    rename("temp.txt", "status.txt");
  }

  //Option 4
  //GOTO Login Page
  else if (option == 4)
  {

    system("cls");
    main();
    return;
  }
```

```
    //Option 5
    //Exit
    else if (option == 5)
    {
        system("cls");
        cout << "Thanks For Using";
        return;
    }

    //Default Option
    else
    {
        system("cls");
        cout << "Wrong Entry \nTry again!";

        Sleep(2000);
        system("cls");

        goto menu;
    }

menu2:
    cout << endl
         << endl
         << endl
         << endl
         << "Select The Appropriate option :- " << endl;
    cout << " 1.Back To Menu" << endl
         << " 2.Goto Login Page" << endl
         << " 3.EXIT" << endl
```

```
        << endl
        << "ENTER YOUR CHOICE :- ";

    int option2;
    cin >> option2;

    if (option2 == 1)
    {
        system("cls");
        goto menu;

        return;
    }
    else if (option2 == 2)
    {

        system("cls");
        main();
        return;
    }
    else if (option2 == 3)
    {
        system("cls");
        cout << "Thanks For Using";
        return;
    }
    else
    {
        system("cls");
        cout << "Wrong Entry \nTry again!";
```

```
        Sleep(2000);
        system("cls");

        goto menu2;
    }
}

//Main Function
int main()
{
    system("cls");

    cout << "Welcome To FEASOMED" << endl
         << endl;
    cout << "LOGIN AS :-" << endl
         << " 1.ADMIN" << endl
         << " 2.MAIN STORAGE" << endl
         << " 3.STATE" << endl
         << " 4.REGION" << endl
         << " 5.HOSPITAL " << endl
         << " 6.WHOLESALER" << endl
         << endl
         << "ENTER THE NUMBER OF YOUR DESIGNATION : -";

    int login;

    cin >> login;

    //Option 1
```

```
   //Admin Option
   if (login == 1)
   {
      //Login ID and Password Admin
      Login pass("Ladmin", "Padmin");

      system("cls");

   admin:
      char a[30];
      char b[30];

      cout << endl
           << "Enter Login Id :- ";
      cin >> a;

      cout << endl
           << "Enter Password :- ";
      char c;

      for (int i = 0; i < 30; i++)
      {
         c = getch();
         if (c == 13)
         {
            b[i] = '\0';
            break;
         }
         b[i] = c;
         cout << '*';
```

```
    }

    if (pass.check(a, b))
    {
        system("cls");
        admin();
    }
    else
    {
        cout << endl
             << endl
             << " Login ID or password is incorrect ! Try Again " << endl
             << endl;
        goto admin;
    }
  }

  //Option 2
  //Main Storage Option
  else if (login == 2)
  {
    //Login ID and Password Main Storage
    Login lmain("Lmain", "Pmain");

    system("cls");

  m_s:
    char a[30];
    char b[30];
```

```
        cout << endl
             << "Enter Login Id :- ";
        cin >> a;

        cout << endl
             << "Enter Password :- ";

        char c;

        for (int i = 0; i < 30; i++)
        {
            c = getch();
            if (c == 13)
            {
                b[i] = '\0';
                break;
            }
            b[i] = c;
            cout << '*';
        }

        if (lmain.check(a, b))
        {
            system("cls");
            main_storage();
        }
        else
        {
            cout << "\n\nLogin ID or password is incorrect ! Try Again\n\n";
            goto m_s;
```

```
    }
  }

  //Option 3
  //State Option
  else if (login == 3)
  {
    system("cls");

  s_s:
    char login1[30];
    char name[30];
    char pass1[30];
    char pass2[30];

    cout << endl
         << "Enter Login Id :- ";
    cin >> login1;

    fstream file("states.txt");
    st st1;

    file.seekg(0, ios::end);

    int n = file.tellg() / sizeof(st1);

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

    for (int i = 0; i < n; i++)
    {
```

```
        file.read((char *)&st1, sizeof(st1));

        if (strcmp(st1.s_id, login1) == 0)
        {
            strcpy(pass1, st1.s_pass);
            strcpy(name, st1.s_name);
            break;
        }
    }

    Login lstate(login1, pass1);
    cout << endl
         << "Enter Password :- ";

    char c;

    for (int i = 0; i < 30; i++)
    {
        c = getch();
        if (c == 13)
        {
            pass2[i] = '\0';
            break;
        }
        pass2[i] = c;
        cout << '*';
    }

    if (lstate.check(login1, pass2))
    {
```

```
            system("cls");
            state(name);
        }
        else
        {
            cout << endl
                 << endl
                 << "Login ID or password is incorrect ! Try Again" << endl
                 << endl;

            goto s_s;
        }
    }

    //Option 4
    //Region Option
    else if (login == 4)
    {
        system("cls");

        region();
    }

    //Option 5
    //Hospital Option
    else if (login == 5)
    {
        system("cls");

    h_s:
```

```
    char login1[30];
    char name[30];
    char pass1[30];
    char pass2[30];

    cout << endl
         << "Enter Login Id :- ";

    cin >> login1;

    fstream file("hospitals.txt");
    hos h1;

    file.seekg(0, ios::end);

    int n = file.tellg() / sizeof(h1);

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

    for (int i = 0; i < n; i++)
    {
        file.read((char *)&h1, sizeof(h1));

        if (strcmp(h1.h_id, login1) == 0)
        {
            strcpy(pass1, h1.h_pass);
            strcpy(name, h1.h_name);
            break;
        }
    }
```

```
        Login lhos(login1, pass1);

        cout << endl
             << "Enter Password :- ";

        char c;

        for (int i = 0; i < 30; i++)
        {
            c = getch();
            if (c == 13)
            {
                pass2[i] = '\0';
                break;
            }
            pass2[i] = c;
            cout << '*';
        }

        if (lhos.check(login1, pass2))
        {
            system("cls");
            hospital(login1);
        }
        else
        {
            cout << endl
                 << endl
                 << "Login ID or password is incorrect ! Try Again" << endl
```

```
            << endl;

        goto h_s;
      }
   }

   //Option 6
   //Wholesaler Option
   else if (login == 6)
   {
      system("cls");

   h_w:
      char login1[30];
      char name[30];
      char pass1[30];
      char pass2[30];

      cout << endl
           << "Enter Login Id :- ";

      cin >> login1;

      fstream file("wholesaler.txt");
      wholesaler h1;

      file.seekg(0, ios::end);

      int n = file.tellg() / sizeof(h1);
```

```
    file.seekg(0, ios::beg);

    int rating;

    for (int i = 0; i < n; i++)
    {
        file.read((char *)&h1, sizeof(h1));

        if (strcmp(h1.r_id, login1) == 0)
        {
            strcpy(pass1, h1.r_pass);
            strcpy(name, h1.name);
            rating = h1.rating;
            break;
        }
    }

    Login lwh(login1, pass1);
    cout << endl
         << "Enter Password :- ";
    char c;

    for (int i = 0; i < 30; i++)
    {
        c = getch();
        if (c == 13)
        {
            pass2[i] = '\0';
            break;
        }
```

```
            pass2[i] = c;
            cout << '*';
        }

        if (lwh.check(login1, pass2))
        {
            system("cls");
            w_saler(name, login1, rating);
        }
        else
        {
            cout << endl
                 << endl
                 << "Login ID or password is incorrect ! Try Again" << endl
                 << endl;

            goto h_w;
        }
    }
    else
    {
        cout << endl
             << endl
             << "enter a valid option" << endl
             << endl;

        main();
    }

    return 0;
```

```
}

//End of Code
//Thank You
```