**Task 01) (Entities present in the current scenario)**

1. Exported Products
2. Offices in different regions
3. Head of regional office
4. Staff member
5. Expenditure of office

**Task 02) (Relevant entities according to scenario)**

1. **Regional Office**

* Location
* Number of staff members
* Number of vehicles allotted by the company
* Departments

1. **Head of Regional Office**
   * Name
   * Salary
   * Responsibilities
   * number of subordinates
2. **Staff Members**
   * Name
   * Designation
   * Salary
   * Address
   * Phone number
3. **Office Expenditure**
   * Electricity Bill
   * Gas bill
   * Water Bill
   * Municipality tax
   * Petrol Expenditure
   * Salary of staff

**Task 03)**

#include <iostream>

using namespace std;

class regional\_office

{

public:

string location;

int number\_of\_staff\_members;

int vehicles\_alloted;

int number\_of\_departments;

void Regional\_office\_info()

{

cout << "The office is located in " << location << "." << endl;

cout << "The number of staff members in this regional office is " << number\_of\_staff\_members << "." << endl;

cout << vehicles\_alloted << " vehicles have been alloted by the head office to this regional office" << endl;

cout << "There are " << number\_of\_departments << " departments in this Regional office"

<< "." << endl;

}

};

class Head\_of\_Regional\_Office

{

public:

string name;

double salary;

string Responsibilites; //would've made a sub-class of responsibilies and made an object of it here but since we haven't learned to do so hence just making a string attribute

int number\_of\_subordinates;

void HRO\_info()

{

cout << "The name of the head of regional branch is " << name << "." << endl;

cout << "His/Her salary is " << salary << "." << endl;

cout << "His responsiblities are as follows:" << endl

<< Responsibilites << "." << endl;

cout << number\_of\_subordinates << " people are working under him." << endl;

}

};

class Staff\_Member

{

public:

string name;

string designation;

double salary;

string address;

int phone\_nubmer;

};

class Office\_Expenditure

{

public:

int Electricity\_bill;

int Gas\_bill;

int Water\_bill;

int Municipality\_tax;

int Petrol\_expenditure;

int staff\_salary\_expenditure;

void total\_expenditure\_of\_the\_regional\_office(int Electricity\_bill, int Gas\_bill, int Water\_bill, int Municipality\_tax, int Petrol\_expenditure, int staff\_salary\_expenditure)

{

double total;

total = Electricity\_bill + Gas\_bill + Water\_bill + Municipality\_tax + Petrol\_expenditure + staff\_salary\_expenditure;

cout << "The total expenditure of this office is " << total << " Rupees per month." << endl;

}

};

int main()

{

regional\_office Office\_01;

cout << "Enter the location of the office." << endl;

cin >> Office\_01.location;

cout << "Enter the nubmer of staff members in the office." << endl;

cin >> Office\_01.number\_of\_staff\_members;

cout << "Enter the number of vehicles alloted by the head office to this regional office." << endl;

cin >> Office\_01.vehicles\_alloted;

cout << "Enter the number of departments in this regional office." << endl;

cin >> Office\_01.number\_of\_departments;

Office\_01.Regional\_office\_info();

Head\_of\_Regional\_Office HRO\_01;

cout << "Enter the name of the head of the regional office" << endl;

cin >> HRO\_01.name;

cout << "Enter the salary of the HRO(Head of regional office)." << endl;

cin >> HRO\_01.salary;

cout << "Enter the responsiblities of the HRO (Describe in a paragraph)." << endl;

getline(cin, HRO\_01.Responsibilites);

cout << "Enter the number of subordinates working under the HRO." << endl;

cin >> HRO\_01.number\_of\_subordinates;

HRO\_01.HRO\_info();

Staff\_Member staff\_01;

cout << "Enter the name of the staff member." << endl;

cin >> staff\_01.name;

cout << "Enter the designation of the staff member." << endl;

cin >> staff\_01.designation;

cout << "Enter the salary of the staff member." << endl;

cin >> staff\_01.salary;

cout << "Enter the address of the staff member." << endl;

getline(cin, staff\_01.address);

cout << "Enter the cell phone number of the staff member." << endl;

cin >> staff\_01.phone\_nubmer;

Office\_Expenditure Expenditure\_office\_01;

cout << "Enter the Electricity Bill of the office." << endl;

cin >> Expenditure\_office\_01.Electricity\_bill;

cout << "Enter the Gas Bill of the office." << endl;

cin >> Expenditure\_office\_01.Gas\_bill;

cout << "Enter the Water Bill of the office." << endl;

cin >> Expenditure\_office\_01.Water\_bill;

cout << "Enter the municipality expenditure of the office." << endl;

cin >> Expenditure\_office\_01.Municipality\_tax;

cout << "Enter the Petrol Expenditure of the office." << endl;

cin >> Expenditure\_office\_01.Petrol\_expenditure;

cout << "Enter the total staff salary expenditure of the office." << endl;

cin >> Expenditure\_office\_01.staff\_salary\_expenditure;

Expenditure\_office\_01.total\_expenditure\_of\_the\_regional\_office(Expenditure\_office\_01.Electricity\_bill,Expenditure\_office\_01.Gas\_bill,Expenditure\_office\_01.Water\_bill,Expenditure\_office\_01.Municipality\_tax,Expenditure\_office\_01.Petrol\_expenditure,Expenditure\_office\_01.staff\_salary\_expenditure);

}