Web Application Practice – Insurance Management System

An insurance company would like to implement a web application to manage their policy sold by their agents to the customers.

The following information of each `Agent` is stored:
`AgentID` – unique string to identify each agent in the company.
`Name` – name of agent
`Gender` – gender of agent, to be stored as a single character, using either "M" or "F"
`Appointment` – appointment of agent
`TeamNo` – team number of the agent
`BaseSalary` – the base monthly salary of the agents.

The following information of each `Customer` is stored:
`CustomerID` – unique string to identify the customer
`Name` – name of customer
`Gender` – gender of customer, to be stored as a single character, using either "M" or "F"
`DoB` – date of birth of customer
`Address` – address of customer
`HealthCondi` – existing health condition of customer

The following information of each `Policy` is stored:
`PolicyID` – policy id to uniquely identify a policy
`YearlyPremium` – yearly premium the customer is required to pay
`TotalYears` – total years the customer is required to pay for the premium
`ProtectedSum` – the protected amount if the insurance condition is met
`CommissionRate` – Commission rate of this policy, which indicates a percentage amount to be credited to the agent who sold the policy

The following information of each `PolicyRecord` is stored:
`PolicyRecordNo` – unique autoincrement integer to identify the policy
`AgentID` – agent number who sold the policy
`CustomerID` – customer ID who bought and is covered by this policy
`PolicyID` – policy id to identify which policy the customer bought
`StartDate` – Date which policy will start

The information is to be stored in four tables:
`Agent`
`Customer`
`Policy`
`PolicyRecord`

Task 1.1

Create an SQL file to show the SQL code required to create the database with the above four tables.

Task 1.2

Read the data from the csv files and write into the database.

Task 1.3

The company would like to access the performance of one particular agent, "Pippa Booth", for the year 2020. Using the name and year, create a sql query which is able to return all policy records sold by this agent in the year, including the details of the following fields and sorted by the starting date of the policy record in ascending order.

```
PolicyRecordNo, StartDate, AgentID, Name, PolicyID
```

Task 1.4

Create a web application, formatted appropriately using css, which provides the following functionality.

1. A search page which user can enter the customer id.
2. The search result will be displayed in a table form to list out all policies under this customer.
3. Customer can click on a link behind each policy to view the details of the policy.

Task 1.5

Create another web application, formatted appropriately using css, which provides the following functionality.

1. A search page which user can enter a team number of the insurance agents.
2. Search through the database and query all the agents who are under this team number.
3. Display in a table form, the overall salary (base + commision) earned by each agent in this team for the period of Jan to Mar 2020.

Agents	Jan	Feb	Mar
Agent1	xxx.xx	xxx.xx	xxx.xx
Agent2	xxx.xx	xxx.xx	xxx.xx
…	…	…	…