Lab Assignment – 5

DBMS

Question 1:

CREATE DATABASE Enterprise\_Employment\_agency\_EEA;

USE Enterprise\_Employment\_agency\_EEA;

CREATE TABLE Candidate (

ApplicationNumber INT,

ApplicationDate DATE,

first\_Name VARCHAR(50),

Designation VARCHAR(50),

HireDate DATE,

Employer VARBINARY(50),

CTC INT,

PRIMARY KEY (ApplicationNumber)

);

CREATE TABLE Personal\_information (

City CHAR(50),

State CHAR(50),

Zip\_code INT,

Phone INT,

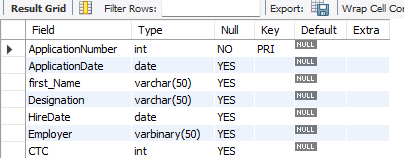
First\_Name VARCHAR(50),

PRIMARY KEY (City, Zip\_code),

ApplicationNumber int,

FOREIGN KEY (ApplicationNumber) REFERENCES Candidate(ApplicationNumber)

);



Question 3:

ALTER TABLE Candidate

ADD CONSTRAINT pk\_candidate PRIMARY KEY (Application#);\

ALTER TABLE Personal\_information

ADD CONSTRAINT pk\_personal\_information PRIMARY KEY (City, Zip\_code);

Question 4;

ALTER TABLE Personal\_information

ADD CONSTRAINT chk\_phone\_not\_null

CHECK (Phone IS NOT NULL);

ALTER TABLE Personal\_information

ADD CONSTRAINT chk\_gender

CHECK (Gender IN ('Male', 'Female'));

ALTER TABLE Candidate

ADD CONSTRAINT chk\_paypackage

CHECK (Paypackage > 0);

Querstion 5:

Insert fewtuples in the above relations.

INSERT INTO Candidate (Application#, Application\_date, Name, Designation, Hire\_date, Employer, Paypackage, CTC)

VALUES (1, '2022-01-01', 'John Doe', 'Software Engineer', '2022-02-01', 'ABC Company', 80000, 10000);

INSERT INTO Candidate (Application#, Application\_date, Name, Designation, Hire\_date, Employer, Paypackage, CTC)

VALUES (2, '2022-01-02', 'Jane Smith', 'Data Analyst', '2022-02-15', 'XYZ Corporation', 70000, 12000);

INSERT INTO Candidate (Application#, Application\_date, Name, Designation, Hire\_date, Employer, Paypackage, CTC)

VALUES (3, '2022-01-03', 'Bob Johnson', 'Project Manager', '2022-03-01', 'DEF Inc.', 90000, 15000);

INSERT INTO Personal\_information (City, State, Zip\_code, Phone, First\_Name, Last\_Name, Gender, Paypackage)

VALUES ('New York', 'NY', 10001, 1234567890, 'John', 'Doe', 'Male', 80000);

INSERT INTO Personal\_information (City, State, Zip\_code, Phone, First\_Name, Last\_Name, Gender, Paypackage)

VALUES ('Los Angeles', 'CA', 90001, 2345678901, 'Jane', 'Smith', 'Female', 70000);

INSERT INTO Personal\_information (City, State, Zip\_code, Phone, First\_Name, Last\_Name, Gender, Paypackage)

VALUES ('Chicago', 'IL', 60601, 3456789012, 'Bob', 'Johnson', 'Male', 90000);

Question 6:

UPDATE Personal\_information SET Zip\_code = 25011 WHERE Zip\_code = 25001;

Questiopn 7:

DELETE FROM Personal\_information WHERE State = 'Maryland';

Querstion 8;

Add a column named CTC to the Candidate table:

Question 9:

SELECT Name FROM Candidate WHERE Name LIKE 'MA%';

Question 10:

SELECT COUNT(\*) FROM Candidate WHERE Hire\_date BETWEEN '2020-08-01' AND '2020-08-31';

Question 11:

SELECT Name, Employer, Paypackage FROM Candidate WHERE Designation IN ('Developer', 'Analyst') AND Paypackage NOT IN (4500, 10000, 15000);

Question 12:

SELECT Name FROM Candidate WHERE SUBSTRING(Name, 3, 1) = 'e';

Question 13;

SELECT Name FROM Candidate WHERE Employer = 'ABC pharma' AND Paypackage IN (60000, 80000);

Question 14:

SELECT \* FROM Personal\_information ORDER BY First\_Name, Last\_Name;

Question 15:

SELECT DISTINCT Employer FROM Candidate;

Question 16:

SELECT State, COUNT(\*) FROM Personal\_information GROUP BY State;

Question 17:

SELECT State FROM Personal\_information GROUP BY State HAVING COUNT(\*) > 10;

Question 18:

SELECT \* FROM Candidate WHERE CTC IS NOT NULL AND LENGTH(Name) = 5;

Question 19:

SELECT Name, Designation, Paypackage FROM Candidate WHERE Gender = 'Male' AND Paypackage = (SELECT MAX(Paypackage) FROM Candidate WHERE CTC IS NOT NULL);

Question 20:

SELECT Employer FROM Candidate WHERE Hire\_date BETWEEN '2020-01-01' AND '2020-01-31' AND CTC > 50000;

Question 21:

SELECT \* FROM Candidate WHERE Gender = 'Female' AND State = 'New York' AND Name LIKE '%kaur%';