---Step 2--- (DDL)

drop table qualification cascade constraints;

drop table prerequisite cascade constraints;

drop table course cascade constraints;

drop table payment cascade constraints;

drop table trainingsession cascade constraints;

drop table agency cascade constraints;

drop table placementrecord cascade constraints;

drop table opening cascade constraints;

drop table company cascade constraints;

drop table employee cascade constraints;

drop table jobhistory cascade constraints;

drop table enrollment cascade constraints;

drop table applicant cascade constraints;

drop table jobassign cascade constraints;

CREATE TABLE AGENCY (

Branch\_ID char(5) NOT NULL PRIMARY KEY,

Branch\_Name varchar(30) NOT NULL,

Branch\_Location varchar(30) NOT NULL

);

CREATE TABLE JOBASSIGN (

Branch\_ID char(5) NOT NULL,

EMP\_ID char(3) NOT NULL,

EMP\_Occupation varchar(30) NOT NULL,

PRIMARY KEY(Branch\_ID, Emp\_ID)

);

CREATE TABLE EMPLOYEE(

Emp\_ID char(3) NOT NULL PRIMARY KEY,

Emp\_FirstName varchar(30) NOT NULL,

Emp\_LastName varchar(30) NOT NULL,

Emp\_Gender varchar(10) NOT NULL,

Emp\_Contact varchar(30) NOT NULL,

Emp\_Address varchar(40) NOT NULL

);

CREATE TABLE COMPANY(

Company\_ID char(3) NOT NULL PRIMARY KEY,

Company\_Name varchar(30) NOT NULL,

Company\_Location varchar(30) NOT NULL,

Company\_Contact varchar(30) NOT NULL

);

CREATE TABLE PAYMENT(

Payment\_ID char(3) NOT NULL PRIMARY KEY,

Payment\_Type varchar(30) NOT NULL,

Payment\_Amount number NOT NULL,

Payment\_Description varchar(30) NOT NULL,

Payment\_DueDate date NOT NULL,

Apct\_ID char(6) NOT NULL

);

CREATE TABLE QUALIFICATION (

Qua\_ID char(4) NOT NULL PRIMARY KEY,

Qua\_Descript varchar(30),

Qua\_StartDate date NOT NULL,

Qua\_EndDate date NOT NULL,

Qua\_Duration integer NOT NULL,

Apct\_ID char(6) NOT NULL,

Op\_ID char(3) NOT NULL,

Branch\_ID char(5) NOT NULL

);

CREATE TABLE PREREQUISITE (

Qua\_ID char(4) NOT NULL,

Course\_ID char(3) NOT NULL,

prerequisite varchar(30),

PRIMARY KEY(Qua\_ID, Course\_ID)

);

CREATE TABLE PLACEMENTRECORD (

FileID char(4) NOT NULL PRIMARY KEY,

PlacedHrs number(6,2) NOT NULL,

Apct\_ID char(6) NOT NULL,

Op\_ID char(3) NOT NULL

);

CREATE TABLE APPLICANT(

Apct\_ID char(6) PRIMARY KEY,

Apct\_FName varchar(30) NOT NULL,

Apct\_LName varchar(30) NOT NULL,

Apct\_Gender varchar(10) NOT NULL,

Apct\_Contact varchar(30) NOT NULL,

Apct\_Address varchar(30) NOT NULL,

FileID char(4),

RecordID char(4),

Payment\_ID char(3),

Qua\_ID char(4),

Enroll\_ID char(3)

);

CREATE TABLE OPENING(

Op\_ID char(3) NOT NULL PRIMARY KEY,

Op\_StartDate date NOT NULL,

Op\_EndDate date NOT NULL,

Op\_HrPayRate float NOT NULL,

Company\_ID char(3) NOT NULL,

Qua\_ID char(4) NOT NULL

);

CREATE TABLE JOBHISTORY(

RecordID char(4) PRIMARY KEY,

Position varchar(30) NOT NULL,

PayRate Float NOT NULL,

Emp\_ID char(3) Not NULL,

Company\_ID char(3) NOT NULL,

Apct\_ID char(6) NOT NULL

);

CREATE TABLE ENROLLMENT(

Enroll\_ID char(3) PRIMARY KEY,

Enroll\_Type varchar(30) NOT NULL,

Enroll\_Status varchar(15) NOT NULL,

Course\_ID char(3) NOT NULL,

Apct\_ID char(6) NOT NULL

);

CREATE TABLE COURSE(

Course\_ID char(3) PRIMARY KEY,

Course\_Title varchar(30) NOT NULL,

Course\_Type varchar(30) NOT NULL,

Course\_Fees number NOT NULL,

Course\_EnrollStatus varchar(30) NOT NULL,

Session\_ID char(3) NOT NULL

);

CREATE TABLE TRAININGSESSION(

Session\_ID char(3) PRIMARY KEY,

Session\_Size integer NOT NULL,

Session\_Type varchar(30) NOT NULL,

Session\_StartDate date NOT NULL,

Session\_EndDate date NOT NULL,

Course\_ID char(3) NOT NULL,

Enroll\_ID char(3) NOT NULL

);

ALTER TABLE PAYMENT

ADD FOREIGN KEY (Apct\_ID) REFERENCES APPLICANT(Apct\_ID);

ALTER TABLE QUALIFICATION

ADD FOREIGN KEY(Apct\_ID) REFERENCES APPLICANT(Apct\_ID);

ALTER TABLE QUALIFICATION

ADD FOREIGN KEY(Op\_ID) REFERENCES Opening(Op\_ID);

ALTER TABLE QUALIFICATION

ADD FOREIGN KEY(Branch\_ID) REFERENCES AGENCY(Branch\_ID);

ALTER TABLE PREREQUISITE

ADD FOREIGN KEY(Qua\_ID) REFERENCES QUALIFICATION(Qua\_ID);

ALTER TABLE PREREQUISITE

ADD FOREIGN KEY(Course\_ID) REFERENCES COURSE(Course\_ID);

ALTER TABLE JOBASSIGN

ADD FOREIGN KEY(Emp\_ID) REFERENCES EMPLOYEE(Emp\_ID);

ALTER TABLE JOBASSIGN

ADD FOREIGN KEY(Branch\_ID) REFERENCES AGENCY(Branch\_ID);

ALTER TABLE PLACEMENTRECORD

ADD FOREIGN KEY(Apct\_ID) REFERENCES APPLICANT(Apct\_ID);

ALTER TABLE PLACEMENTRECORD

ADD FOREIGN KEY(Op\_ID) REFERENCES Opening(Op\_ID);

ALTER TABLE APPLICANT

ADD FOREIGN KEY(FileID) REFERENCES PLACEMENTRECORD(FileID);

ALTER TABLE APPLICANT

ADD FOREIGN KEY(RecordID) REFERENCES JOBHISTORY(RecordID);

ALTER TABLE APPLICANT

ADD FOREIGN KEY(Payment\_ID) REFERENCES PAYMENT(Payment\_ID);

ALTER TABLE APPLICANT

ADD FOREIGN KEY(Qua\_ID) REFERENCES QUALIFICATION(Qua\_ID);

ALTER TABLE APPLICANT

ADD FOREIGN KEY(Enroll\_ID) REFERENCES ENROLLMENT(Enroll\_ID);

ALTER TABLE OPENING

ADD FOREIGN KEY(Company\_ID) REFERENCES COMPANY(Company\_ID);

ALTER TABLE OPENING

ADD FOREIGN KEY(Qua\_ID) REFERENCES QUALIFICATION(Qua\_ID);

ALTER TABLE JOBHISTORY

ADD FOREIGN KEY(Emp\_ID) REFERENCES EMPLOYEE(Emp\_ID);

ALTER TABLE JOBHISTORY

ADD FOREIGN KEY(Company\_ID) REFERENCES COMPANY(Company\_ID);

ALTER TABLE JOBHISTORY

ADD FOREIGN KEY(Apct\_ID) REFERENCES APPLICANT(Apct\_ID);

ALTER TABLE ENROLLMENT

ADD FOREIGN KEY(Course\_ID) REFERENCES COURSE(Course\_ID);

ALTER TABLE ENROLLMENT

ADD FOREIGN KEY(Apct\_ID) REFERENCES APPLICANT(Apct\_ID);

ALTER TABLE COURSE

ADD FOREIGN KEY(Session\_ID) REFERENCES TRAININGSESSION(Session\_ID);

ALTER TABLE TRAININGSESSION

ADD FOREIGN KEY(Course\_ID) REFERENCES COURSE(Course\_ID);

ALTER TABLE TRAININGSESSION

ADD FOREIGN KEY(Enroll\_ID) REFERENCES ENROLLMENT(Enroll\_ID);

---Step 3--- (DML)

ALTER SESSION SET NLS\_DATE\_FORMAT = 'DD/MM/YYYY';

INSERT INTO AGENCY VALUES('A1001','Pinehill branch', 'Auckland');

INSERT INTO AGENCY VALUES('A1002', 'Wellington branch','Wellington');

INSERT INTO AGENCY VALUES('A1003', 'Hamilton branch','Hamilton');

INSERT INTO AGENCY VALUES('A1004', 'Whangarei branch','Whangarei');

INSERT INTO AGENCY VALUES('A1005', 'Christchurch branch','Christchurch');

INSERT INTO EMPLOYEE VALUES('V01', 'John', 'Smith', 'M', '021097112321', '6 normal street, Albany');

INSERT INTO EMPLOYEE VALUES('V02', 'Sharon', 'Miller', 'F', '02102898767', '20 victoria street, Auckland city');

INSERT INTO EMPLOYEE VALUES('V03', 'Ashely', 'Brown', 'F', '022097342321', '67 cresent street, Stonefield');

INSERT INTO EMPLOYEE VALUES('V04', 'Edgar', 'Johnson', 'M', '022183732321', '55 mamory street, Glenfield');

INSERT INTO EMPLOYEE VALUES('V05', 'Erik', 'Jackson', 'M', '02198676756', '17 secret street, Oteha');

INSERT INTO COMPANY VALUES('C01', 'PB', 'Auckland', '9099234');

INSERT INTO COMPANY VALUES('C02', 'Spark', 'Wellington', '9534234');

INSERT INTO COMPANY VALUES('C03', 'JB HI-FI', 'Christchurch', '63839876');

INSERT INTO COMPANY VALUES('C04', 'Fonterra', 'Hamilton', '90096786');

INSERT INTO COMPANY VALUES('C05', 'CocaCola', 'Whangarei', '9099234');

INSERT INTO PAYMENT VALUES('P01', 'Enrollment fee', 650, 'enrollment fee', '20/02/2019', 'L00001');

INSERT INTO PAYMENT VALUES('P02', 'Training session fee', 1200, 'training session fee', '10/07/2019', 'L00004' );

INSERT INTO PAYMENT VALUES('P03', 'Enrollment fee', 760, 'enrollment fee', '20/11/2019', 'L00005' );

INSERT INTO PAYMENT VALUES('P04', 'Training session fee', 2300, 'Training session fee', '09/05/2019', 'L00003' );

INSERT INTO PAYMENT VALUES('P05', 'Enrollment fee', 4200, 'enrollment fee', '16/08/2019', 'L00002' );

INSERT INTO QUALIFICATION VALUES('Q001', 'IT Qualification', '20/02/2018', '23/06/2018', 4, 'L00004', 'O03', 'A1002' );

INSERT INTO QUALIFICATION VALUES('Q002', 'Business Qualification', '16/04/2018', '17/09/2018', 5, 'L00003', 'O04', 'A1005' );

INSERT INTO QUALIFICATION VALUES('Q003', 'Computer Science Qualification', '01/01/2019', '01/06/2018', 5, 'L00001', 'O05', 'A1001' );

INSERT INTO QUALIFICATION VALUES('Q004', 'Mathematic Qualification', '20/02/2019', '23/06/2018', 4, 'L00005', 'O01', 'A1004' );

INSERT INTO QUALIFICATION VALUES('Q005', 'IT Qualification', '20/02/2018', '23/06/2018', 4, 'L00002', 'O02', 'A1003');

INSERT INTO PREREQUISITE VALUES('Q001', 'C02', 'IT Qualification');

INSERT INTO PREREQUISITE VALUES('Q003', 'C04', 'Computer Science Qualification');

INSERT INTO PREREQUISITE VALUES('Q004', 'C01', 'Mathematic Qualification');

INSERT INTO PREREQUISITE VALUES('Q002', 'C03', 'IT Qualification');

INSERT INTO PREREQUISITE VALUES('Q005', 'C05', 'Business Qualification');

INSERT INTO PLACEMENTRECORD VALUES('F001', 3, 'L00001', 'O02');

INSERT INTO PLACEMENTRECORD VALUES('F002', 6, 'L00003', 'O04');

INSERT INTO PLACEMENTRECORD VALUES('F003', 4.5, 'L00004', 'O05');

INSERT INTO PLACEMENTRECORD VALUES('F004', 5, 'L00002', 'O03');

INSERT INTO PLACEMENTRECORD VALUES('F005', 2, 'L00005', 'O01');

INSERT INTO APPLICANT VALUES('L00001', 'John', 'Smith', 'M', '021097112321', '6 normal street, Albany', 'F002', 'J003', 'P02', 'Q001', 'E04');

INSERT INTO APPLICANT VALUES('L00002', 'Mila', 'Taylor', 'F', '022387468309', '12 avenue street, Pinehill', 'F001', 'J005', 'P01', 'Q002', 'E05');

INSERT INTO APPLICANT VALUES('L00003', 'Aurora', 'smith', 'F', '022897364321', '30 east road, Auckland city', 'F005', 'J001', 'P05', 'Q003', 'E02');

INSERT INTO APPLICANT VALUES('L00004', 'Leon', 'Johnson', 'M', '021387493827', '50 avenue, Newmarket', 'F003', 'J002', 'P04', 'Q004', 'E03');

INSERT INTO APPLICANT VALUES('L00005', 'Arthur', 'Jackson', 'M', '021738294829', '18 high street, Auckland City', 'F004', 'J004', 'P03', 'Q005', 'E01');

INSERT INTO OPENING VALUES('O01', '16/04/2019', '16/08/2019', 15, 'C02','Q002' );

INSERT INTO OPENING VALUES('O02', '03/09/2019', '04/12/2019', 20, 'C03', 'Q003');

INSERT INTO OPENING VALUES('O03', '23/12/2018', '28/04/2019', 45, 'C05', 'Q005');

INSERT INTO OPENING VALUES('O04', '06/05/2019', '16/10/2019', 60, 'C01', 'Q004');

INSERT INTO OPENING VALUES('O05', '20/06/2018', '14/11/2018', 19, 'C04', 'Q001');

INSERT INTO JOBHISTORY VALUES('J001', 'Manager', 19, 'V02', 'C03', 'L00002');

INSERT INTO JOBHISTORY VALUES('J002', 'Staff', 15, 'V03', 'C04', 'L00001');

INSERT INTO JOBHISTORY VALUES('J003', 'Chairman', 17.7, 'V05', 'C05', 'L00004');

INSERT INTO JOBHISTORY VALUES('J004', 'Intern', 10, 'V01', 'C01', 'L00005');

INSERT INTO JOBHISTORY VALUES('J005', 'Staff', 15, 'V04', 'C02', 'L00003');

INSERT INTO ENROLLMENT VALUES('E01', 'Advance topic', 'pending', 'C02', 'L00003');

INSERT INTO ENROLLMENT VALUES('E02', 'Basic topic', 'enrolled', 'C03', 'L00001');

INSERT INTO ENROLLMENT VALUES('E03', 'Advance topic', 'withdraw','C01', 'L00005');

INSERT INTO ENROLLMENT VALUES('E04', 'Basic topic', 'pending', 'C05', 'L00004');

INSERT INTO ENROLLMENT VALUES('E05', 'Advance topic', 'enrolled', 'C04', 'L00002');

INSERT INTO COURSE VALUES('C01', 'Database developer', 'advance topic', 3000, 'pending', 'S02');

INSERT INTO COURSE VALUES('C02', 'Database structure', 'basic topic', 1200, 'enrolled', 'S01');

INSERT INTO COURSE VALUES('C03', 'user experience design', 'advance topic', 3000, 'enrolled', 'S03');

INSERT INTO COURSE VALUES('C04', 'Database developer', 'advance topic', 3000, 'pending', 'S05');

INSERT INTO COURSE VALUES('C05', 'Database developer', 'advance topic', 3000, 'pending', 'S04');

INSERT INTO TRAININGSESSION VALUES('S01', 10, 'Practical courses', '16/04/2019', '16/08/2019', 'C02', 'E03');

INSERT INTO TRAININGSESSION VALUES('S02', 20, 'Theoretical courses', '16/04/2018', '16/08/2018', 'C03', 'E02');

INSERT INTO TRAININGSESSION VALUES('S03', 10, 'Practical courses', '04/03/2019', '01/10/2019', 'C04', 'E05');

INSERT INTO TRAININGSESSION VALUES('S04', 20, 'Theoretical courses', '16/12/2018', '10/09/2019', 'C01', 'E04');

INSERT INTO TRAININGSESSION VALUES('S05', 10, 'Practical courses', '09/10/2018', '19/08/2019', 'C05', 'E01');

INSERT INTO JOBASSIGN VALUES('A1003', 'V02', 'Branch Manager');

INSERT INTO JOBASSIGN VALUES('A1002', 'V01', 'Staff');

INSERT INTO JOBASSIGN VALUES('A1004', 'V04', 'Chairman');

INSERT INTO JOBASSIGN VALUES('A1005', 'V03', 'Intern');

INSERT INTO JOBASSIGN VALUES('A1001', 'V05', 'Staff');