SQL Queries

# **Table Student**

## **Create Table Student:**

create table Student(StudentID varchar(20), Fname varchar(20) NOT NULL, Lname varchar(20),Street varchar(20), City varchar(20), state varchar(20), zip int, StartTerm varchar(20), BirthDate date, FacultyID varchar(20), MajorID varchar(20), Phone int);

## **Adding Primary Key**

ALTER TABLE student ADD PRIMARY KEY (STUDENTID);

## **Adding Foreign Keys**

ALTER TABLE student ADD Constraint student\_major\_id\_fk FOREIGN KEY (MAJORID) REFERENCES major (MajorID);

**INSERT INTO student**

INSERT INTO STUDENT VALUES('00100','Cruise','Tom','BleeckerStreet','Manhattan','NY','10012','2005',TO\_DATE('2002-04-30','YYYY-MM-DD'), '123','100','8273011131');

INSERT INTO student VALUES('00103','Rickles','Deborah','NorthKierland','Scottdale','Arizona','85254','2017',TO\_DATE('2001-06-21','YYYY-MM-DD'), '431','500','64538391020');

INSERT INTO student VALUES('00104','Lee','Brian','FirstLane','hope','NY','11373','2018',TO\_DATE('2016-05-26','YYYY-MM-DD'), '345','600','7896391020');

INSERT INTO student VALUES('00101','Tyler','Mickey','MorrisAvenue','Hill','NY','10468','2006',TO\_DATE('1984-03-18','YYYY-MM-DD'), '555','500','9568391020');

INSERT INTO student VALUES('00102','Patel','Rajesh','Phoenix','','Arizona','08837','2015',TO\_DATE('1985-11-28','YYYY-MM-DD'), '111','400','76458391020');

# **Table Faculty**

## **Create Table Faculty**

CREATE TABLE FACULTY(FacultyID varchar2(20) PRIMARY KEY,Name varchar2(20) NOT NULL,RoomID varchar2(20),Phone int,DeptId varchar(20));

## **Insert Into Faculty**

INSERT INTO faculty VALUES('111','Rajdeep','11','9568391020','1');

INSERT INTO faculty VALUES('222','HimansuDas','20','7654890231','2');

INSERT INTO faculty VALUES('123','Biswajit','11','9854890231','3');

INSERT INTO faculty VALUES('234','Williams','12','8434890265','1');

INSERT INTO faculty VALUES('444','Collins','21','9674890265','5');

## **Updating Table Faculty**

UPDATE faculty set ROOMID='1' where facultyid='111';

UPDATE faculty set ROOMID='2' where facultyid='222';

UPDATE faculty set ROOMID='3' where facultyid='123';

UPDATE faculty set ROOMID='4' where facultyid='234';

UPDATE faculty set ROOMID='4' where facultyid='444';

## **Adding Foreign Key**

ALTER TABLE faculty ADD CONSTRAINT faculty\_roomid\_fk FOREIGN KEY (ROOMID) REFERENCES location (ROOMID);

# **Table Course**

## **Create Table Course**

CREATE TABLE course(CourseID varchar2(20) PRIMARY KEY, Title varchar2(20), credits varchar2(20) DEFAULT 0, PreReq varchar(20));

## **Insert Into Course**

INSERT INTO course VALUES('CS1001','DSA','4',NULL);

INSERT INTO course VALUES('DB2002','DBMS','3','SQL');

INSERT INTO course VALUES('IT2003','OS','3','BASH');

INSERT INTO course VALUES('WT1006','WebTech','3','HTML');

INSERT INTO course VALUES('CO1004','COA','3',NULL);

# **Table CRSSECTION**

## **Create Table CRSSECTION**

CREATE TABLE CRSSECTION(CsID varchar2(20) PRIMARY KEY, CourseID varchar(20), Section varchar2(20), TermID varchar2(20), FacultyID varchar(20), Day varchar(20), StartTime varchar(20), EndTime varchar(20),RoomID varchar2(20), MaxCount int DEFAULT 0);

## **Insert Into CRSSECTION**

INSERT INTO crssection VALUES('1101','CIS265','01','WN03','111','Mon','09:00','10:30','13','30');

INSERT INTO crssection VALUES('1102','CIS253','01','WN03','123','Thu','09:00','10:30','13','40');

INSERT INTO crssection VALUES('1103','MA150','02','SP03','111','Fri','10:30','12:00','14','45');

INSERT INTO crssection VALUES('1104','IT2003','03','AT03','345','Mon','10:30','12:00','14','30');

INSERT INTO crssection VALUES('1105','IT2003','02','AT03','345','Fri','10:30','12:00','14','35');

## **Update Table CRSSECTION**

UPDATE crssection set courseid='CS1001' where CSID='1101';

UPDATE crssection set courseid='DB2002' where CSID='1102';

UPDATE crssection set courseid='IT2003' where CSID='1103';

UPDATE crssection set courseid='WT1006' where CSID='1104';

UPDATE crssection set courseid='CO1004' where CSID='1105';

## **Adding Foreign Key**

ALTER TABLE CRSSECTION ADD CONSTRAINT crssection\_courseid\_fk FOREIGN KEY (COURSEID) REFERENCES course (COURSEID);

# **Table Term**

## **Create Table Term**

create table term(TermID varchar(20) PRIMARY KEY, TermDesc varchar(20) NOT NULL, StartDate date, EndDate date);

## **Insert Into Term**

INSERT INTO term

VALUES('SP22','Spring2022',TO\_DATE('2022-01-03','YYYY-MMDD'),TO\_DATE('2022-06-01','YYYY-MM-DD'));

INSERT INTO term VALUES('AT22','Autumn2022',TO\_DATE('2022-07-03','YYYY-MM-DD'),TO\_DATE('2023-01-18','YYYY-MM-DD'));

INSERT INTO term VALUES('SP23','Spring2023',TO\_DATE('2023-01-19','YYYY-MM-DD'),TO\_DATE('2023-06-02','YYYY-MM-DD'));

INSERT INTO term VALUES('AT23','Autumn2023',TO\_DATE('2023-07-03','YYYY-MM-DD'),TO\_DATE('2024-01-18','YYYY-MM-DD'));

INSERT INTO term VALUES('SP24','Spring2024',TO\_DATE('2024-01-19','YYYY-MM-DD'),TO\_DATE('2024-06-02','YYYY-MM-DD'));

# **Table Room**

## **Create Table Room**

create table room(RoomType varchar(20) PRIMARY KEY, RoomDesc varchar(20) NOT NULL);

## **Insert Into Room**

INSERT INTO room VALUES('L','Laboratory');

INSERT INTO room VALUES('C','Classroom');

INSERT INTO room VALUES('O','Office');

INSERT INTO room VALUES('VCO','VC Office');

INSERT INTO room VALUES('ADT','Auditorium');

# **Table Registration**

## **Create Table Registration**

CREATE TABLE registration(StudentID varchar(20) PRIMARY KEY, CsID varchar(20), MidTerm varchar(20), Final varchar(20), RegStatus varchar(20));

## **Insert Into Registration**

INSERT INTO registration VALUES('00100','1103','Apr','June','PND');

INSERT INTO registration VALUES('00101','1102','Oct','Dec','CNF');

INSERT INTO registration VALUES('00102','1104','Apr','June','CNF');

INSERT INTO registration VALUES('00103','1102','Jan','Apr','PND');

INSERT INTO registration VALUES('00104','1101','Oct','Dec','CNF');

# **Table Department**

## **Create Table Department**

CREATE TABLE department(DeptID varchar(20), DeptName varchar(20), FacultyID varchar(20), PRIMARY KEY (DeptID, DeptName));

## **Insert Into Department**

INSERT INTO department VALUES('1','Computer Science','111');

INSERT INTO department VALUES('2','Telecommunication','222');

INSERT INTO department VALUES('3','Electronics','333');

INSERT INTO department VALUES('4','Accounting','444');

INSERT INTO department VALUES('5','Mechanical','555');

# **Table Major**

## **Create Table Major**

CREATE TABLE major (MajorID varchar(20) PRIMARY KEY, MajorDesc varchar(20) NOT NULL);

## **Insert Into Major**

INSERT INTO major VALUES('100','Accounting');

INSERT INTO major VALUES('200','Computer Science');

INSERT INTO major VALUES('300','Telecommunication');

INSERT INTO major VALUES('400','Mechanical');

INSERT INTO major VALUES('500','Electronics');

# **Table Location**

## **Create Table Location**

CREATE TABLE location (RoomID varchar(20) PRIMARY KEY, Building varchar(20),

RoomNo varchar(20), Capacity int DEFAULT 0, RoomType varchar(20));

## **Insert Into Location**

INSERT INTO location VALUES ('1','WingA','501','4','AC');

INSERT INTO location VALUES ('2','WingB','602','3','NonAC');

INSERT INTO location VALUES ('3','WingC','703','2','AC');

INSERT INTO location VALUES ('4','WingC','802','2','AC');

INSERT INTO location VALUES ('5','WingD','401','3','NonAC');

# **Table Employee**

## **Create Table Employee**

CREATE TABLE employee (EmployeeID int, Lname varchar(20) NOT NULL, Fname varchar(20) NOT NULL, PositionID int, Supervisor varchar(20), HireDate date, Salary int, Commission int, DeptID int NOT NULL, QualID int );

## **Adding Foreign Keys**

alter table employee ADD Constraint employee\_positionid\_fk FOREIGN KEY (positionID) REFeRENCES position(positionid);

alter table employee add constraint employee\_deptid\_fk FOREIGN KEY (deptID) REFERENCES dept(deptid);

alter table employee add constraint employee\_qualid\_fk FOREIGN KEY (QualID) REFERENCES qualification (QualID);

## **Altering Table**

ALTER TABLE employee ADD (UNIQUE (Lname));

## **Insert Into Employee**

INSERT INTO employee

VALUES('111','Smith','John','1',NULL,TO\_DATE('1960-04-15','YYYY-MM-DD'),'265000','35000','10','1');

INSERT INTO employee

VALUES('246','Houstan','Larry','2','111',TO\_DATE('1967-05-19','YYYY-MM-DD'),'150000','10000','40','2');

INSERT INTO employee

VALUES('123','Gupta','Nikhil','2','111',TO\_DATE('1991-02-12','YYYY-MM-DD'),'75000',NULL,'10','2');

INSERT INTO employee

VALUES('543','Dave','Derek','2','111',TO\_DATE('1995-03-15','YYYY-MM-DD'),'80000','20000','20','1');

INSERT INTO employee

VALUES('433','McCall','Alex','3','543',TO\_DATE('1997-05-05','YYYY-MM-DD'),'66500',NULL,'20','4');

# **Table Emplevel**

## **Create Table EmpLevel**

CREATE TABLE emplevel (LevelNo int, LowSalary int, HighSalary int);

## **Insert Into Emplevel**

INSERT INTO emplevel VALUES('1','5000','25000');

INSERT INTO emplevel VALUES('2','25000','50000');

INSERT INTO emplevel VALUES('3','50000','100000');

INSERT INTO emplevel VALUES('4','100000','500000');

INSERT INTO emplevel VALUES('4','500000','1000000');

# **Table Position**

## **Create Table Position**

CREATE TABLE position (PositionID int PRIMARY KEY , PoscDesc VARCHAR(20));

## **Insert Into Position**

INSERT INTO position VALUES('1', 'President');

INSERT INTO position VALUES('2', 'Manager');

INSERT INTO position VALUES('3', 'Programmer');

INSERT INTO position VALUES('4', 'Accountant');.

INSERT INTO position VALUES('5', 'Salesman');

# **Table Qualification**

## **Create Table Qualification**

CREATE TABLE qualification (QualID int PRIMARY KEY, QualDesc varchar(20));

## **Insert Into Qualification**

INSERT INTO qualification VALUES('1','Doctorate');

INSERT INTO qualification VALUES('2','Masters');

INSERT INTO qualification VALUES('3','Bachelores');

INSERT INTO qualification VALUES('4','Associates');

INSERT INTO qualification VALUES('5','High School');

# **Table Dept**

## **Create Table Dept**

CREATE TABLE dept (DeptID int PRIMARY KEY, DeptName varchar(20) NOT NULL, Location varchar(20), EmployeeID int);

## **Insert Into Dept**

INSERT INTO dept VALUES('10','Finance','Charlotte','123');

INSERT INTO dept VALUES('20','Infosys','New York','543');

INSERT INTO dept VALUES('30','Sales','Wood Bridge','135');

INSERT INTO dept VALUES('40','Marketing','Los Angeles','246');

# **Table Dependent**

## **Create Table Dependent**

CREATE TABLE dependent (EmployeeID int PRIMARY KEY, DependentID int, DepDOB date, Relation varchar(20));

## **Insert Into Dependent**

INSERT INTO dependent

VALUES ('543','1',TO\_DATE('1958-09-28','YYYY-MM-DD'),'Spouse');

INSERT INTO dependent

VALUES ('200','2',TO\_DATE('1988-10-14','YYYY-MM-DD'),'Son');

INSERT INTO dependent

VALUES ('111','1',TO\_DATE('1975-04-02','YYYY-MM-DD'),'Daughter');

INSERT INTO dependent

VALUES ('222','3',TO\_DATE('1976-10-06','YYYY-MM-DD'),'Spouse');

INSERT INTO dependent

VALUES ('123','2',TO\_DATE('1997-08-23','YYYY-MM-DD'),'Son');