
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('2  
002-04-30','YYYY-MM-DD'), '123','100','8273011131');
```

```
INSERT INTO student  
VALUES('00103','Rickles','Deborah','NorthKierland','Scottsdale','Arizona','85254','2017',T  
O_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','Houston','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');
```