

Name:Kartikay Agrawal

Reg No.:2148064

MDS171-Database Technologies

Executing SQL Queries to perform various actions on a University Schema

--1

```
CREATE TABLE Instructor (Instructor_ID VARCHAR(20), Instructor_Name VARCHAR(20),  
Designation VARCHAR(20), Dept_Name VARCHAR(20));
```

```
CREATE TABLE Student (Stud_ID VARCHAR(20), Stud_Name VARCHAR2(20), Designation  
VARCHAR(20), Dept_Name VARCHAR(20), Tot_credit NUMBER(20), DOB DATE);
```

--2

```
INSERT INTO Instructor (Instructor_ID, Instructor_Name, Designation, Dept_Name) VALUES  
( 'I123', 'Ankit', 'Associate_Professor', 'Physics');
```

```
INSERT INTO Instructor (Instructor_ID, Instructor_Name, Designation, Dept_Name) VALUES  
( 'I234', 'Ben', 'Professor', 'Chemistry');
```

```
INSERT INTO Instructor (Instructor_ID, Instructor_Name, Designation, Dept_Name) VALUES  
( 'I127', 'Carlson', 'Associate_Professor', 'Maths');
```

```
INSERT INTO Instructor (Instructor_ID, Instructor_Name, Designation, Dept_Name) VALUES  
( 'I129', 'Danish', 'Associate_Professor', 'Physics');
```

```
INSERT INTO Student (Stud_ID, Stud_Name, Designation, Dept_Name, Tot_credit, DOB)  
VALUES ('S150', 'Amit', '1MDS', 'Computer_Science', 134, '02-AUG-1997');
```

```
INSERT INTO Student (Stud_ID, Stud_Name, Designation, Dept_Name, Tot_credit, DOB)  
VALUES ('S152', 'Blake', '2MDS', 'Data_Science', 105, '05-FEB-1998');
```

```
INSERT INTO Student (Stud_ID, Stud_Name, Designation, Dept_Name, Tot_credit, DOB)  
VALUES ('S154', 'Clark', '1MCA', 'Data_Science', 60, '07-OCT-1997');
```

```
INSERT INTO Student (Stud_ID, Stud_Name, Designation, Dept_Name, Tot_credit, DOB)  
VALUES ('S156', 'Dawson', '2MCA', 'Computer_Science', 45, '17-JAN-1998');
```

--3

```
SELECT * FROM STUDENT;
```

--4

```
SELECT * FROM STUDENT WHERE DOB BETWEEN '10-MAR-1997' AND '10-MAR-1998';
```

--5

```
SELECT Stud_Name, Stud_ID FROM Student WHERE Tot_credit > 100;
```

--6

```
SELECT Stud_Name, Stud_ID FROM Student WHERE Tot_credit < 50 AND  
Dept_name='Computer_Science';
```

--7

```
SELECT Instructor_Name FROM Instructor WHERE Dept_name='Physics';
```

--8

```
SELECT Instructor_Name FROM Instructor WHERE Dept_name='Maths' AND  
Designation='Associate_Professor';
```

--9

```
ALTER TABLE INSTRUCTOR ADD BASIC_PAY NUMBER(38);
```

```
ALTER TABLE INSTRUCTOR ADD HRA NUMBER(38);
```

```
ALTER TABLE INSTRUCTOR ADD GROSS_SALARY NUMBER(38);
```

```
UPDATE Instructor SET Basic_Pay=250000 , HRA=50000 , Gross_Salary=500000 WHERE  
Designation='Professor';
```

```
UPDATE Instructor SET Basic_Pay=160000 , HRA=37500 , Gross_Salary=230000 WHERE  
Designation='Assistant Professor';
```

```
UPDATE Instructor SET Basic_Pay=220000 , HRA=30000 , Gross_Salary=350000 WHERE  
Designation='Associate Professor';
```

```
UPDATE Instructor SET Basic_Pay=200000 , HRA=25000 , Gross_Salary=320000 WHERE  
Designation='Adjunct Professor';
```

--10

```
ALTER TABLE Student modify(Tot_credit VARCHAR(20));
```

```
ALTER TABLE Student modify(Stud_Name VARCHAR(50));
```

```
ALTER TABLE Student modify(Stud_Name VARCHAR(20));
```

--11

```
ALTER TABLE Instructor
```

```
DROP COLUMN Basic_Pay;
```

--12

```
FLASHBACK TABLE Instructor TO
```

BEFORE DROP DESC Instructor

--13

CREATE TABLE Student_Regno

AS SELECT

Stud_Name , Stud_ID

FROM Student;

--14

SELECT Stud_ID, Stud_Name from Student where Tot_credit = (Select Max(Tot_credit) from Student);

--15

DROP TABLE Student;

Select * from Student;

TRUNCATE TABLE Instructor;

Select * from Instructor;

OUTPUTS

Table created. 1 row(s) inserted. 1 row(s) inserted. 1 row(s) inserted. 1 row(s) inserted. 1 row(s) inserted. 1 row(s) inserted. 1 row(s) inserted. 1 row(s) inserted.

Result Set 59

STUD_ID	STUD_NAME	DESIGNATION	DEPT_NAME	TOT_CREDIT	DOB
S150	Amit	1MDS	Computer_Science	134	02-AUG-97
S152	Blake	2MDS	Data_Science	105	05-FEB-98

S154	Clark	1MCA	Data_Science	60	07-OCT-97
S156	Dawson	2MCA	Computer_Science	45	17-JAN-98

[Download CSV](#)

4 rows selected.

STUD_ID	STUD_NAME	DESIGNATION	DEPT_NAME	TOT_CREDITS	DOB
S150	Amit	1MDS	Computer_Science	134	02-AUG-97
S152	Blake	2MDS	Data_Science	105	05-FEB-98
S154	Clark	1MCA	Data_Science	60	07-OCT-97
S156	Dawson	2MCA	Computer_Science	45	17-JAN-98

[Download CSV](#)

4 rows selected.

STUD_NAME	STUD_ID
Amit	S150
Blake	S152

[Download CSV](#)

2 rows selected.

STUD_NAME	STUD_ID
Dawson	S156

[Download CSV](#)

INSTRUCTOR_NAME

Ankit

Danish

[Download CSV](#)

2 rows selected.

INSTRUCTOR_NAME

Carlson

[Download CSV](#) Table altered. ORA-01430: column being added already exists in table ORA-01430: column being added already exists in table 1 row(s) updated. 0 row(s) updated. 0 row(s) updated. 0 row(s) updated. ORA-01439: column to be modified must be empty to change datatype Table altered. Table altered. Table altered. ORA-00933: SQL command not properly ended

STUD_ID STUD_NAME

S150 Amit

[Download CSV](#) Table dropped. ORA-00942: table or view does not exist Table truncated. no data found