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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='Assisstant 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](https://livesql.oracle.com/apex/f?p=590:1:16166859590933::NO:RP::)  
4 rows selected.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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](https://livesql.oracle.com/apex/f?p=590:1:16166859590933::NO:RP::)  
4 rows selected.

|  |  |
| --- | --- |
| **STUD\_NAME** | **STUD\_ID** |
| Amit | S150 |
| Blake | S152 |

[Download CSV](https://livesql.oracle.com/apex/f?p=590:1:16166859590933::NO:RP::)  
2 rows selected.

|  |  |
| --- | --- |
| **STUD\_NAME** | **STUD\_ID** |
| Dawson | S156 |

[Download CSV](https://livesql.oracle.com/apex/f?p=590:1:16166859590933::NO:RP::)

|  |
| --- |
| **INSTRUCTOR\_NAME** |
| Ankit |
| Danish |

[Download CSV](https://livesql.oracle.com/apex/f?p=590:1:16166859590933::NO:RP::)  
2 rows selected.

|  |
| --- |
| **INSTRUCTOR\_NAME** |
| Carlson |

[Download CSV](https://livesql.oracle.com/apex/f?p=590:1:16166859590933::NO:RP::) 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](https://livesql.oracle.com/apex/f?p=590:1:16166859590933::NO:RP::) Table dropped. ORA-00942: table or view does not exist Table truncated. no data found