

## Task 8 – Credits

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### Credit Task 1

#### Part a to c

DROP TABLE STUDENT;

CREATE TABLE STUDENT (

STUID NUMBER PRIMARY KEY

, FULLNAME VARCHAR(30)

, GENDER VARCHAR(1)

);

DROP TABLE STAFF;

CREATE TABLE STAFF (

STFID NUMBER PRIMARY KEY

, FULLNAME VARCHAR(30)

, GENDER VARCHAR(1)

);

DROP TABLE SEMINAR;

CREATE TABLE SEMINAR (

SEMID NUMBER PRIMARY KEY

, TITLE VARCHAR(30)

, SDATE DATE

);

DROP TABLE STAFFALLOCATION;

```
CREATE TABLE STAFFALLOCATION (  
    STFID    NUMBER  
    , SEMID NUMBER  
    , PRIMARY KEY (STFID, SEMID)  
    , FOREIGN KEY (SEMID) references SEMINAR  
    , FOREIGN KEY (STFID) references STAFF  
);
```

```
DROP TABLE ATTENDANCE;  
  
CREATE TABLE ATTENDANCE (  
    StuID    NUMBER,  
    SemID    NUMBER,  
    PRIMARY KEY (STUID, SEMID),  
    FOREIGN KEY (StuID) references STUDENT,  
    FOREIGN KEY (SemID) references SEMINAR,  
    Score    INTEGER  
);
```

```
INSERT INTO STUDENT (STUID,FULLNAME,GENDER) VALUES (2719000,'Emma Jay','F');  
INSERT INTO STUDENT (STUID,FULLNAME,GENDER) VALUES (9091431,'Dave Smith','M');  
INSERT INTO STUDENT (STUID,FULLNAME,GENDER) VALUES (9198112,'Jane Jones','F');  
INSERT INTO STUDENT (STUID,FULLNAME,GENDER) VALUES (8184398,'Mike Jacobs','M');
```

```
INSERT INTO STAFF (STFID,FULLNAME,GENDER) VALUES (131,'Karen Lovell','F');  
INSERT INTO STAFF (STFID,FULLNAME,GENDER) VALUES (232,'Denise Randle','F');  
INSERT INTO STAFF (STFID,FULLNAME,GENDER) VALUES (455,'Sean Mellerick','F');  
INSERT INTO STAFF (STFID,FULLNAME,GENDER) VALUES (217,'Haley Daniel','F');
```

```
INSERT INTO SEMINAR (SEMID,TITLE,SDATE) VALUES (401,'Database Security','13-JAN-2016');  
INSERT INTO SEMINAR (SEMID,TITLE,SDATE) VALUES (402,'Agile Programming','14-JAN-2016');  
INSERT INTO SEMINAR (SEMID,TITLE,SDATE) VALUES (406,'Business Intelligence','13-JAN-2016');
```

INSERT INTO SEMINAR (SEMID,TITLE,SDATE) VALUES (409,'Social Media Analytics','14-JAN-2016');

INSERT INTO STAFFALLOCATION (STFID, SEMID) VALUES (131, 401);

INSERT INTO STAFFALLOCATION (STFID, SEMID) VALUES (455, 401);

INSERT INTO STAFFALLOCATION (STFID, SEMID) VALUES (131, 402);

INSERT INTO STAFFALLOCATION (STFID, SEMID) VALUES (217, 402);

INSERT INTO STAFFALLOCATION (STFID, SEMID) VALUES (455, 406);

INSERT INTO ATTENDANCE (StuID, SemID, Score) VALUES (9091431, 401, 8);

INSERT INTO ATTENDANCE (StuID, SemID, Score) VALUES (9198112, 401, 5);

INSERT INTO ATTENDANCE (StuID, SemID, Score) VALUES (8184398, 401, 7);

INSERT INTO ATTENDANCE (StuID, SemID, Score) VALUES (9198112, 402, 6);

INSERT INTO ATTENDANCE (StuID, SemID, Score) VALUES (9091431, 402, 7);

INSERT INTO ATTENDANCE (StuID, SemID, Score) VALUES (9198112, 406, 4);

---

**Part d1**

Paste the UNION statement and Result set here.

```
SELECT FullName, Gender FROM STUDENT
```

```
UNION ALL
```

```
SELECT FullName, Gender FROM STAFF
```

```
ORDER BY 1, 2 ASC;
```

```
SELECT FullName,  
Gender FROM  
STUDENT UNION ALL  
SELECT FullName,  
Gender FROM STAFF  
ORDER BY 1, 2 ASC
```

FULLNAME	GENDER
Dave Smith	M
Denise Randle	F
Emma Jay	F
Haley Daniel	F
Jane Jones	F
Karen Lovell	F
Mike Jacobs	M
Sean Mellerick	F

OK. 8 rows selected.

---

**Part d2**

Paste the SUBQUERY statement and Result set here.

```
SELECT * FROM ATTENDANCE
```

```
WHERE SCORE > (SELECT AVG(SCORE)FROM ATTENDANCE);
```

Enter  
Statements:

```
SELECT * FROM ATTENDANCE  
WHERE SCORE > (SELECT AVG(SCORE)FROM ATTENDANCE);
```

Execute

Clear

```
SELECT * FROM  
ATTENDANCE WHERE  
SCORE > (SELECT  
AVG(SCORE)FROM  
ATTENDANCE)
```

STUID	SEMID	SCORE
9091431	401	8
8184398	401	7
9091431	402	7

OK. 3 rows selected.

---

**Part d3**

Paste the LEFT OUTER JOIN statement and Result set here.

```
SELECT STAFF.FullName, STAFFALLOCATION.SEMID  
FROM STAFF  
LEFT JOIN STAFFALLOCATION ON STAFF.STFID = STAFFALLOCATION.STFID;
```

```
SELECT STAFF.FullName,  
STAFFALLOCATION.SEMID  
FROM STAFF LEFT JOIN  
STAFFALLOCATION ON  
STAFF.STFID =  
STAFFALLOCATION.STFID
```

FULLNAME	SEMID
Karen Lovell	401
Karen Lovell	402
Haley Daniel	402
Denise Randle	
Sean Mellerick	401
Sean Mellerick	406

OK. 6 rows selected.

---

**Part d4**

Paste the RIGHT OUTER JOIN statement and Result set here.

```
SELECT STUDENT.FULLNAME, SEMINAR.TITLE, ATTENDANCE.SCORE
FROM ATTENDANCE
RIGHT OUTER JOIN STUDENT ON STUDENT.STUID = ATTENDANCE.STUID
LEFT JOIN SEMINAR ON ATTENDANCE.SEMID = SEMINAR.SEMID;
```

```
SELECT STUDENT.FULLNAME,  
SEMINAR.TITLE, ATTENDANCE.SCORE  
FROM ATTENDANCE RIGHT OUTER  
JOIN STUDENT ON STUDENT.STUID =  
ATTENDANCE.STUID LEFT OUTER JOIN  
SEMINAR ON ATTENDANCE.SEMID =  
SEMINAR.SEMID
```

FULLNAME TITLE		SCORE
Jane Jones	Database Security	5
Dave Smith	Database Security	8
Mike Jacobs	Database Security	7
Jane Jones	Agile Programming	6
Dave Smith	Agile Programming	7
Jane Jones	Business Intelligence	4
Emma Jay		

OK. 7 rows selected.

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