



Database Analysis & Design

INF60009

SP2 2018

Task 8 – Credits

Student ID: 102227966

Student Name: THI KHANH HOA NGUYEN

Credit Task 1

Part a to c

Paste all DROP, CREATE & INSERT statements here.

```
DROP TABLE STUDENT;
CREATE TABLE STUDENT (
  STUID      NUMBER PRIMARY KEY
, FULLNAME  VARCHAR(30)
, GENDER    VARCHAR(1)
);
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');

DROP TABLE STAFF;
CREATE TABLE STAFF (
  STFID      NUMBER PRIMARY KEY
, FULLNAME  VARCHAR(30)
, GENDER    VARCHAR(1)
);
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');

DROP TABLE SEMINAR;
CREATE TABLE SEMINAR (
  SEMID      NUMBER PRIMARY KEY
, TITLE     VARCHAR(30)
, SDATE     DATE
);
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');

DROP TABLE STAFF_ALLOCATION;
CREATE TABLE STAFF_ALLOCATION (
  STFID NUMBER ,
  SEMID NUMBER,
  PRIMARY KEY (STFID, SEMID),
  FOREIGN KEY (STFID) REFERENCES STAFF,
  FOREIGN KEY (SEMID) REFERENCES SEMINAR
```

```

);

INSERT INTO STAFF_ALLOCATION (STFID, SEMID) VALUES (131,401);
INSERT INTO STAFF_ALLOCATION (STFID, SEMID) VALUES (455,401);
INSERT INTO STAFF_ALLOCATION (STFID, SEMID) VALUES (131,402);
INSERT INTO STAFF_ALLOCATION (STFID, SEMID) VALUES (217,402);
INSERT INTO STAFF_ALLOCATION (STFID, SEMID) VALUES (455,406);

DROP TABLE ATTENDANCE;
CREATE TABLE ATTENDENCE (
  STUID NUMBER
  , SEMID NUMBER
  , SCORE NUMBER
  , PRIMARY KEY (STUID, SEMID)
  ,FOREIGN KEY (STUID) REFERENCES STUDENT
  ,FOREIGN KEY (SEMID) REFERENCES SEMINAR
);

INSERT INTO ATTENDENCE (STUID, SEMID, SCORE) VALUES (9091431, 401, 8);
INSERT INTO ATTENDENCE (STUID, SEMID, SCORE) VALUES (9198112, 401, 5);
INSERT INTO ATTENDENCE (STUID, SEMID, SCORE) VALUES (8184398, 401, 7);
INSERT INTO ATTENDENCE (STUID, SEMID, SCORE) VALUES (9198112, 402, 6);
INSERT INTO ATTENDENCE (STUID, SEMID, SCORE) VALUES (9091431, 402, 7);
INSERT INTO ATTENDENCE (STUID, SEMID, SCORE) VALUES (9198112, 406, 4);

```

Ensure that you include statements to create and populate all FIVE tables

Part d1

Paste the UNION statement and Result set here.

```

SELECT FULLNAME, GENDER FROM STUDENT

UNION ALL

SELECT FULLNAME, GENDER FROM STAFF

ORDER BY GENDER, FULLNAME ASC;

```

Enter Statements:	<pre>SELECT <u>FULLNAME</u>, GENDER FROM STUDENT UNION ALL SELECT <u>FULLNAME</u>, GENDER FROM STAFF ORDER BY GENDER, <u>FULLNAME</u> ASC;</pre>
<div>Execute</div> <div>Clear</div>	

```
SELECT FULLNAME,
GENDER FROM
STUDENT UNION ALL
SELECT FULLNAME,
GENDER FROM STAFF
ORDER BY GENDER,
FULLNAME ASC
```

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

OK. 8 rows selected.

Part d2

Paste the SUBQUERY statement and Result set here.

```
SELECT * FROM ATTENDENCE
```

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

Enter Statements:	<pre>SELECT * FROM ATTENDENCE WHERE SCORE>(SELECT AVG(SCORE) FROM ATTENDENCE);</pre>
<div>Execute Clear</div>	

**SELECT * FROM
ATTENDENCE WHERE
SCORE>(SELECT
AVG(SCORE) FROM
ATTENDENCE)**

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.

Enter Statements:	<pre>SELECT S.FULLNAME, A.SEMID FROM STAFF S LEFT OUTER JOIN STAFF_ALLOCATION A ON S.STFID=A.STFID;</pre>
<div>Execute Clear</div>	

```
SELECT S.FULLNAME,
A.SEMID FROM STAFF
S LEFT OUTER JOIN
STAFF_ALLOCATION
A ON
S.STFID=A.STFID
```

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

OK. 6 rows selected.

Paste the RIGHT OUTER JOIN statement and Result set here.

Enter Statements:	SELECT U.FULLNAME, S.TITLE, E.SCORE
	FROM ATTENDENCE E
	RIGHT OUTER JOIN SEMINAR S
	ON E.SEMID=S.SEMID
	RIGHT OUTER JOIN STUDENT U
	ON E.STUID=U.STUID;
<div>Execute Clear</div>	

```
SELECT U.FULLNAME, S.TITLE, E.SCORE
FROM ATTENDENCE E RIGHT OUTER
JOIN SEMINAR S ON E.SEMID=S.SEMID
RIGHT OUTER JOIN STUDENT U ON
E.STUID=U.STUID
```

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

OK. 7 rows selected.