

Oracle Name: _____
 Practice Class: _____
 Isolation Date: _____

!!! Teamwork !!!

Create a new TABLESPACE:

Name: **SHOP_LASTNAME** **SHOP_GRIESMAYER**
 Datafile: **shop_lastname1.dbf** **shop_griesmayer1.dbf**
 Size: 200 MByte; autoextend up to 300 MByte
 Datafile: **shop_lastname2.dbf** **shop_griesmayer2.dbf**
 Size: 100 MByte

Keep the SQL-Statements for this task!

Create the following users:

Name: **LASTNAME1** **GRIESMAYER**
LASTNAME2 **MEIER**

The users should use the tablespace **SHOP_LASTNAME**.

```
CREATE USER GRIESMAYER PROFILE "DEFAULT" IDENTIFIED BY "oracle"
DEFAULT TABLESPACE TBS_GRIESMAYER_LOCKING
TEMPORARY TABLESPACE TEMP
ACCOUNT UNLOCK;
GRANT SELECT ANY DICTIONARY TO GRIESMAYER;
GRANT UNLIMITED TABLESPACE TO GRIESMAYER;
GRANT CONNECT TO GRIESMAYER;
GRANT RESOURCE TO GRIESMAYER;
```

```
CREATE USER MEIER PROFILE "DEFAULT" IDENTIFIED BY "oracle"
DEFAULT TABLESPACE TBS_GRIESMAYER_LOCKING
TEMPORARY TABLESPACE TEMP
ACCOUNT UNLOCK;
GRANT SELECT ANY DICTIONARY TO MEIER;
GRANT UNLIMITED TABLESPACE TO MEIER;
GRANT CONNECT TO MEIER;
GRANT RESOURCE TO MEIER;
```

Use the **LASTNAME1** user and create the following table:

LASTNAME1_PRODUCT		
PRODUCT_ID	INTEGER	PRIMARY KEY
PRODUCT_NAME	VARCHAR(20)	
PRODUCT_PRICE	DECIMAL(6,2)	

Add 10 rows.

Check and explain the result of the following SQL Statements using the Isolation Level "Read Committed":

lastname (team member 1)	lastname (team member 2)
SET TRANSACTION ISOLATION LEVEL READ COMMITTED;	SET TRANSACTION ISOLATION LEVEL READ COMMITTED;
UPDATE PRODUCT SET PRODUCT_PRICE = 20 WHERE PRODUCT_ID = 1; UPDATE PRODUCT SET PRODUCT_PRICE = 40 WHERE PRODUCT_ID = 2; INSERT INTO PRODUCT VALUES (11, 'Water', 0.5); DELETE FROM PRODUCT WHERE PRODUCT_ID = 4;	
Check PRODUCT table and explain	Check PRODUCT table and explain
	UPDATE PRODUCT SET PRODUCT_PRICE = PRODUCT_PRICE/2 WHERE PRODUCT_ID = 1; UPDATE PRODUCT SET PRODUCT_PRICE = 20 WHERE PRODUCT_ID = 2;
	What is the difference between the two SQL statements!
	Explain the current situation.
COMMIT; SET TRANSACTION ISOLATION LEVEL READ COMMITTED;	
Check PRODUCT table and explain	Check PRODUCT table and explain
	COMMIT;
Check PRODUCT table and explain	Check PRODUCT table and explain

Refill the table!!!

Check and explain the result of the following SQL Statements using the Isolation Level "Serializable":

lastname (team member 1)	lastname (team member 2)
SET TRANSACTION ISOLATION LEVEL SERIALIZABLE;	SET TRANSACTION ISOLATION LEVEL SERIALIZABLE;
UPDATE PRODUCT SET PRODUCT_PRICE = 20 WHERE PRODUCT_ID = 1; UPDATE PRODUCT SET PRODUCT_PRICE = 40 WHERE PRODUCT_ID = 2; INSERT INTO PRODUCT VALUES (11, 'Water', 0.5); DELETE FROM PRODUCT WHERE PRODUCT_ID = 4;	
Check PRODUCT table and explain	Check PRODUCT table and explain
COMMIT; SET TRANSACTION ISOLATION LEVEL SERIALIZABLE;	
Check PRODUCT table and explain	Check PRODUCT table and explain
	UPDATE PRODUCT SET PRODUCT_PRICE = 0.7 WHERE PRODUCT_ID = 11;

Refill the table!!!

Check and explain the result of the following SQL Statements using the Isolation Level "Read only":

lastname (team member 1)	lastname (team member 2)
SET TRANSACTION READ ONLY;	
Check PRODUCT table and explain	Check PRODUCT table and explain
	UPDATE PRODUCT SET PRODUCT_PRICE = 40 WHERE PRODUCT_ID = 2;
Check PRODUCT table and explain	Check PRODUCT table and explain
	COMMIT;
Check PRODUCT table and explain	Check PRODUCT table and explain
UPDATE PRODUCT SET PRODUCT_PRICE = 20 WHERE PRODUCT_ID = 1;	