The purpose of a worksheet is to provide a support structure for your study and to provide better coverage of routine introductory exercises prior to completing more challenging homework assignments. Much of the text comes from questions that arise during the course.

Please attempt the worksheet on your own. Answers are provided under the Practice module.

 To receive credit for completing the worksheet, you must write 'Done' in a textbox on D2L submission folder when you have finished the worksheet. Do not paste your work. Just say 'Done'.

**Question 1.**

The DB must take specific actions to ensure that transactions operate without interference from concurrently executing database statements. What property ensures this?

**Question 2.**

What property of the database  ensures that only valid transactional data will be written to the database?

**Question 3.**

Consider the following table Xbox\_Games(name, price) and assume that these values already exist in the database ('ok\_game', 40), ('good\_game', 50), ('AWESOME\_game', 60).  We have the following two transactions:

T1: BEGIN TRANSACTION

            S1: UPDATE  Xbox\_Games SET price=22 WHERE name='ok\_game'

            S2: INSERT INTO Xbox\_Games VALUES ('BAD\_Game', 0)

            S3: UPDATE Xbox\_Games SET price=38 WHERE name='ok\_game'

     COMMIT;

T2: BEGIN TRANSACTION

            SET TRANSACTION ISOLATION LEVEL SERIALIZABLE

            S4: SELECT AVG(price) AS average\_price FROM Xbox\_Games

     COMMIT;

Above two transactions are hitting the DBMS roughly at the same time. What are the possible values for average\_price?

I.   50

II.  44

III. 37