Anushka Verma (z1911937)
Database
Assignment 9
03/14/2021

PART I – THE POWER OF COMMIT

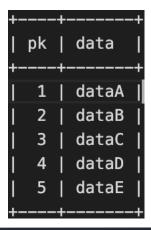**Question 1.2)** What is the result of running the SELECT statement. Why?

Result:

`Empty set (0.001 sec)`

Since there was no "End Transaction", "COMMIT", or even "Rollback" used,
It caused the "SELECT" query to be an empty set.

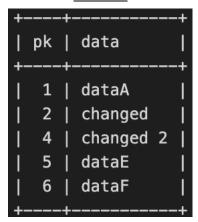**Question 1.5)** What is the result of the SELECT statement above?

Result:

```
+----+-------+
| pk | data  |
+----+-------+
|  1 | dataA |
|  2 | dataB |
|  3 | dataC |
|  4 | dataD |
|  5 | dataE |
+----+-------+
```

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PART II – THE POWER OF ROLLBACK

Question 2.4) What is the result of the SELECT statement, and why?

Result:

```
+----+-----------+
| pk | data      |
+----+-----------+
|  1 | dataA     |
|  2 | changed   |
|  4 | changed 2 |
|  5 | dataE     |
|  6 | dataF     |
+----+-----------+
```
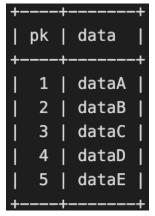
This is our result since we inputted new data which changed datasets B and C
And deleted dataset D.

Question 2.5) What is the result of the SELECT statement, and why?

Result:

```
+----+-------+
| pk | data  |
+----+-------+
|  1 | dataA |
|  2 | dataB |
|  3 | dataC |
|  4 | dataD |
|  5 | dataE |
+----+-------+
```

Yes, we have updated and inserted new data but then why do we have our original data? Well, that's because the "ROLLBACK" command rolls back to the original changes. Therefore, we have our original data (before inserting and updating it) as our result.

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PART III – BE AWARE OF DEADLOCK

Question 3) What happened here?

Result:

```
MariaDB [z1911937]> UPDATE Taco
    ->    SET data = 'data12B'
    ->    WHERE pk = 1;
Ctrl-C -- query killed. Continuing normally.
ERROR 1317 (70100): Query execution was interrupted
```

Our database has seemed to have gone into the Deadlock stage. This is mainly due to session 1 unable to complete until session 2 would complete itself. For session 2 to complete, session 1 needed to be done when in reality it wasn't. Which was also the reason why it waited for the user to input something. Therefore, it resulted in a deadlock.