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Assignment 9 Transaction Processing

1.Start your first mysql session and issue the following mysql statements setting the output file:  
**\T Assgn9out.txt  
use znnnnnnn;**

**create table tempTable(tempNo INT,tempName char(10))ENGINE=INNODB;**

**create index temp\_idx on tempTable(tempNo);**

**start transaction;**

**insert into tempTable values(1, 'T1');**

**insert into tempTable values(2, 'T2');**

2.Start your second mysql session, issue following mysql statements:

**\T Assgn9out.txt  
use znnnnnnn;  
select \* from tempTable;**What is result of select? Explain.

The query returns an empty set because the transaction has not finished.

3.Switch back to your first mysql session, issue following mysql statement:  
**commit;  
\t**

**exit;**

4.Switch back to your second mysql session, issue following mysql statements:  
**select \* from tempTable;  
\t**

**exit;**

What is result of select? Explain.

The query displays the table created in the database now because the transaction was committed.

Part II: Power of Rollback

1.Start another mysql session, issue following mysql statements:

**\T Assgn9out.txt**

**use znnnnnnn;**

**start transaction;**

**delete from tempTable where tempNo = 1;**

**select \* from tempTable;**

what is result of select? Explain.

The table row was deleted, despite the transaction not being finished because it was being accessed within the same MySQL session.

2.Issue the following mysql statements:

**rollback;  
select \* from tempTable;**what is result of select? Explain

The deleted row was restored back into the table because the rollback undoes changes made during a transaction.

**\t  
exit;**

Part III: Be Aware of Deadlock

Using another two sessions of mysql do the following in order specified:

|  |  |
| --- | --- |
| Session I | Session II |
| **\T Assgn9out.txt**  **use znnnnnn;**  **start transaction;** |  |
| switch to session II |  |
|  | **\T Assgn9out.txt**  **use znnnnnn;**  **start transaction;** |
|  | switch back to session I |
| **update tempTable**  **set tempName = 'T11'**  **where tempNo=1;** |  |
| switch to session II |  |
|  | **update tempTable**  **set tempName= 'T22'**  **where tempNo = 2;** |
|  | switch back to session I |
| **update tempTable**  **set tempName = 'T21'**  **where tempNo= 2;** |  |
| switch to session II |  |
|  | **update tempTable**  **set tempName = 'T12'**  **where tempNo = 1;** |

Explain what happened.

Error 1213 (40001)

A Deadlock was found when trying to get lock. MySQL suggests restarting transaction.