IST 659- Week 11

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# Questions

Write the following as SQL programs. For each, include the SQL as a screenshot with the output of the SQL Code.

1. Provide a screenshot of your code execution from the walkthrough were you modified **p\_upsert\_major** in the **TinyU** database to be transaction-safe.  
   Graphical user interface, text, application, email

   Description automatically generated
2. Provide a screenshot of examples of executing the **p\_upsert\_major** procedure to demonstrate it is transaction safe.  
   In this one, I used last week’s query to insert or update. I was not able to think of any entries that could throw error.  
   Table

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3. Re-write the **p\_place\_bid** stored procedure from the **vBay** database so that it is transaction safe. Provide a screenshot of the code and its execution.  
   Graphical user interface, text, application, email

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   Graphical user interface, text, application, email

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4. Execute your stored procedure in step 3 to demonstrate the procedure works. Make user 2, Bid $105 on item 36 and show the bid was placed with a SELECT.  
   On running the exec command I am getting the following error, however after running the select query it shows the bid has been updated.

This is the error:  
Graphical user interface, text, application, email

Description automatically generated  
The updated table I have attached below:

Table

Description automatically generated

1. Re-write the **p\_rate\_user** stored procedure from the **VBay** database so that it is transaction safe. Provide a screenshot of the code and its execution.  
   Graphical user interface, text, application

   Description automatically generated
2. Execute the stored procedure in step 5 to demonstrate the rollback works. You should give a 6 star rating and then execute again where someone attempts to rate themselves. Produce as screen shot as evidence the rollback worked.  
   I keep getting the same error of mismatching number of begin and commit on running the exec command together. I am not able to understand why the error is occurring.   
   On running the select command, exec command and select command separately the table does not show any change. But it is not showing the error message.  
   Graphical user interface, text, application, email

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3. There is a conceptual data requirement which says that no **TinyU** major can have more than 15 students in it. (I know, this seems silly but think of the bigger problem – how to we enforce a specific minimum or maximum cardinality instead of just 1 or “many”?) Write data logic using an instead of trigger to do this.  
   I was unable to do this and the next question. I am having difficulty understanding the instead of trigger. I am not understanding how to compare the count of the majors with the major in the inserted table.
4. Test step 7 by trying to add or update a student and change their major to ADS. The ADS major has 15 students already. Your code should drop/create the trigger and also test the success and failure of the trigger.