**Part 01**

**Use ITI DB**

* Create a trigger to prevent anyone from inserting a new record in the Department table ( Display a message for user to tell him that he can’t insert a new record in that table )
* Create a table named “StudentAudit”. Its Columns are (Server User Name , Date, Note)

| Server UserName | Date | Note |
| --- | --- | --- |
|  |  |  |

Create a trigger on student table after insert to add Row in StudentAudit table

* The Name of User Has Inserted the New Student
* Date
* Note that will be like ([username] Insert New Row with Key = [Student Id] in table [table name]

Create a trigger on student table instead of delete to add Row in StudentAudit table

* + The Name of User Has Inserted the New Student
  + Date
  + Note that will be like “try to delete Row with id = [Student Id]”

**Part 02**

**Use MyCompany DB:**

* Create a trigger that prevents the insertion Process for Employee table in March.

**Use IKEA\_Company:**

* Create an Audit table with the following structure

| ProjectNo | UserName | ModifiedDate | Budget\_Old | Budget\_New |
| --- | --- | --- | --- | --- |
| p2 | Dbo | 2008-01-31 | 95000 | 200000 |

This table will be used to audit the update trials on the Budget column (Project table, IKEA\_Company DB)

If a user updated the budget column then the project number, username that made that update, the date of the modification and the value of the old and the new budget will be inserted into the Audit table

(Note: This process will take place only if the user updated the budget column)

**Part 03**

**Use ITI DB :**

* Create an index on column (Hiredate) that allows you to cluster the data in table Department. What will happen?
* Create an index that allows you to enter unique ages in the student table. What will happen?
* Try to Create Login Named(RouteStudent) who can access Only student and Course tables from ITI DB then allow him to select and insert data into tables and deny Delete and update

**Part 04**

* Create a table named ‘ReturnedBooks’ With the Following Structure :

| **User SSN** | **Book Id** | **Due Date** | **Return**  **Date** | **fees** |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |

then create A trigger that instead of inserting the data of returned book checks if the return date is the due date or not if not so the user must pay a fee and it will be 20% of the amount that was paid before.

* Create a trigger to prevent anyone from Modifying or Delete or Insert in the Employee table ( Display a message for user to tell him that he can’t take any action with this Table)

* Testing Referential Integrity , Mention What Will Happen When:

Create an index on column (Salary) that allows you to cluster the data in table Employee.

* Try to Create Login With Your Name And give yourself access Only to Employee and Floor tables then allow this login to select and insert data into tables and deny Delete and update (Don't Forget To take screenshot to every step)