

SQLServer Lab

1. Create a stored procedure without parameters to show the number of students per department name.[use ITI DB]
2. Create a stored procedure that will check for the # of employees in the project p1 if they are more than 3 print message to the user “The number of employees in the project p1 is 3 or more” if they are less display a message to the user “The following employees work for the project p1” in addition to the first name and last name of each one. [Company DB]
3. Create a stored procedure that will be used in case there is an old employee has left the project and a new one become instead of him. The procedure should take 3 parameters (old Emp. number, new Emp. number and the project number) and it will be used to update works_on table. [Company DB]
4. add column budget in project table and insert any draft values in it then then 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, Company DB)

Example:

If a user updated the budget column then the project number, user name 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

5. Create a trigger to prevent anyone from inserting a new record in the Department table [ITI DB]
“Print a message for user to tell him that he can’t insert a new record in that table”

6. Create a trigger that prevents the insertion Process for Employee table in March [Company DB].

7. Create a trigger on student table after insert to add Row in Student Audit table (Server User Name , Date, Note) where note will be “[username] Insert New Row with Key=[Key Value] in table [table name]”

Server User Name	Date	Note

8. Create a trigger on student table instead of delete to add Row in Student Audit table (Server User Name, Date, Note) where note will be“ try to delete Row with Key=[Key Value]”

1. Create a sequence object that allow values from 1 to 10 without cycling in a specific column and test it.
2. Create full, differential Backup for SD DB.

Part2:

1. Transform all functions in lab7 to be stored procedures

Part3: What is the difference between the following objects in SQL Server

1. batch, script and transaction
2. trigger and stored procedure
3. stored procedure and functions
4. drop, truncate and delete statement
5. select and select into statement
6. local and global variables
7. convert and cast statements
8. DDL,DML,DCL,DQL and TCL
9. For xml raw and for xml auto
10. Table valued and multi statemcent function
11. Varchar(50) and varchar(max)
12. Datetime, datetime2(7) and datetimeoffset(7)
13. Default instance and named instance

14. SQL and windows Authentication
15. Clustered and non-clustered index
16. Group by rollup and group by cube
17. Sequence object and identity
18. Inline function and view
19. Table variable and temporary table
20. Row_number() and dense_Rank() function