



SSN COLLEGE OF ENGINEERING
Department of
Computer Science &
Engineering

Faculty:

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CS8481 – DBMS Lab

Assigned: 10-Mar-22

Assignment – 2

Title: DML Fundamentals

Manipulating Nobel Laureate Information Using DML

Aim: To learn the following:

- Update operations such as INSERT, UPDATE, DELETE
- Controlling the transactions using COMMIT, SAVEPOINT, ROLLBACK
- SELECT Clause
 - Using arithmetic operators, logical operators
 - Using LIKE, BETWEEN, IN keywords
 - Using Character, Date, Number and Aggregate functions
 - Using GROUP BY, HAVING, ORDER BY

Schema to be used for the following queries:

nobel (*noble_id*, *name*, *gender*, *category*, *field*, *year_AWARD*, *Aff_role*, *dob*, *country*) where *Aff_role* describes the nobel laureates' affiliation towards an institute/organization or his/her role in that field for the award.

Populate the *nobel* relation as given in the script file (*nobel.sql*)

Write DML queries for the following:

- Display the nobel laureate(s) who born after 1-Jul-1960.
- Display the Indian laureate (name, category, field, country, year awarded) who was awarded in the Chemistry category.
- Display the laureates (name, category, field and year of award) who was awarded between 2000 and 2005 for the Physics or Chemistry category.
- Display the laureates name with their age at the time of award for the Peace category.
- Display the laureates (name, category, aff_role, country) whose name starts with A or ends with A, but not from Isreal.
- Display the name, gender, affiliation, dob and country of laureates who was born in 1950's. Label the dob column as *Born 1950*.
- Display the laureates (name, gender, category, aff_role, country) whose name starts with A, D or H. Remove the laureate if he/she do not have any affiliation. Sort the results in ascending order of name.
- Display the university name(s) that has to its credit by having at least 2 nobel laureate with them.
- List the date of birth of youngest and eldest laureates by country-wise. Label the column as Younger, Elder respectively. Include only the country having more than one laureate. Sort the output in alphabetical order of country.
- Show the details (year award, category, field) where the award is shared among the laureates in the same category and field. Exclude the laureates from USA.

Use TCL Statements

11. Mark an intermediate point in the transaction(savepoint).
12. Insert a new tuple into the nobel relation.
13. Update the aff_role of literature laureates as 'Linguists'.
14. Delete the laureate(s) who was awarded in Enzymes field.
15. Discard the most recent update operations (rollback).
16. Commit the changes.

What you have to submit:

1. Schema Diagram with constraints
2. Demo script file

