COMP 3610 : Database Systems

Class Activity #7

Due date : 14th march time : Midnight (30 marks)

For this activity use the tables workers and branch created for activity#1. You need to add 2 more tables to the schema. One is bonus table and another is pastManagers table (with 4 attributes – brancid, staffid, managerfrom and managerTo).

pastManagers will get data inserted when a new manager joins a branch. (Q1)

Now create and test the following procedures/functions.

Q1. Create a trigger that will run on update on the branch table when a manager is changed.

Update branch set managerCode = ‘B1001’, managersince=sysdate; [5 marks]

On update, the trigger should run to:

1. Insert the information on the pastManager table as managerCode, BranchCode, dateFrom, dateTo

To create a bonus table, run the command as:

Update staff set bonus = 2000, bonus\_date=sysdate where staffId=’S100’;

Q2. Create a trigger to add bonus to bonus table, and every time a bonus is given to staff, it should be added to the bonus table.[5 marks]

Q3. Write a function to pass worker\_id and return the number of bonuses received by the employee. (Not the total amount, # only) [5 marks]

Q4. Write a procedure that will take the worker\_id as the parameter. The procedure should first print the first\_name, Last\_name, department and date of joining.

Followed by this must be the list of all the bonuses the employee has obtained listed date wise.

At the end, it must list the total bonus received by the worker. Also Use the function defined in Q1 to display the total number of bonus transactions for the employee at the end. [6 marks]

**Sample output:**

**Bonus Details of Amitabh Singh from Admin, since 14-02-20**

**16-02-20. 4500**

**5-03-21 5000**

**----------------------------------**

**Total 9500**

**----------------------------------**

**Total transactions : ## (this should come from Q1 function)**

\*\* please add a few more records in bonus table to have this output

Q5. Write a function that should pass the worker\_id and bonus amount. The procedure will check if the worker has got the bonus before. It should add the new bonus into bonus table and also print an appropriate message depending upon the past bonus amounts [4 marks]

**Congratulations of your first bonus (if it’s the first time)**

**OR**

**Wow! You got the biggest bonus till yet (if the past bonus were less than todays)**

**OR**

**Enjoy the bonus!!! (else)**

Other way of adding data to pastManager is using the following procedure:

Q6. Write a procedure newBranchManager that passes staffid and branch id and do the following:

1. Set the managercode of the branched to staffId.
2. Make sure staff works at the same branch.
3. Make sure staff designation is changed to manager.
4. Before updating branch table, make sure to insert a record in pastManagers table with the values branchCode, staffId, managerSince, sysdate

with 4 attributes – brancid, staffid, managerfrom and managerTo. [5 marks]