**Database Systems Lab**

**(BSCS F18 Morning)**

**Lab 12 version 1**

**Instructions:**

• You must complete all tasks individually. Absolutely **NO** collaboration is allowed.

• Any traces of plagiarism/cheating would result in an “F” grade in this course.

• Late submissions will **NOT** be accepted, in any case.

• Please use the Format of your answers as sample shared to you.

**Submission Procedure:**

• You are also required to submit .docx (Microsoft Word) file.

* Name of your file should be **YourRollNumber\_Lab\_Number**

e.g. BCSF18M00X\_Lab\_12.

• The file should contain the question, the query and the clear screen short of output after running the query.

• You have to submit your lab file to:

* **MCSF19M002@PUCIT.EDU.PK**

• The subject of the email should be **YourRollNumber\_LabVersion#**. e.g. BCSF18M00X\_Version1.

Note: please paste the code of your function/procedure/trigger and screenshot of it’s runtime behavior by putting sample input data. For example in case of trigger like in Q#2 then you have to run at least once all of insert/update & delete statements.

• **Submission Deadline: 5:00 pm**

1. Create a trigger that will show a line on insert operation.

“New Record has been added”

1. Create a table for log that stores the Date, username doing the operation and operation name (insert, update and delete) on EMP table.
2. Before inserting new record add the commission of employee as 30% of his salary only if the employee is of department no. 10.
3. Create a trigger that will be fired after updating the salary of an employee. It should display the new sal, old sal and their difference
4. i) Disable the Above inserted trigger

ii)Drop the trigger

1. Create a new table named EMPSAL that will contain fields for average, min and max salary of emp table and a trigger that will update EMPSAL values on each insertion, updating or deletion in emp table.
2. Using Acc\_master & Acc\_trans table discussed in the lecture ,

Create a trigger on acc\_trans which would be fired before any new transaction. If the transaction is of type ‘W’, you should make sure that a single account holder cannot withdraw more than 20,000 in one day. (If customer withdraws 15,000 once and tries to withdraw 6,000, it should display “you cannot withdraw more than 20,000 in one day”)

1. Create a trigger on Acc\_trans, If the transaction type is ‘W’ you should make sure that the remaining balance should not be less than 5000.
2. Create a trigger on Acc\_trans, If the transaction type is ‘D’,

the transaction should be succeeded only if the amount provided is greater than zero.

1. Display all triggers