**TYBCOM 2016-17 SEM-V**

**MYSQL PRACTICAL-4**

**A] SUBQUERY**

**Q1. Create a database EMP<rno>**

**Q2. Create table employee with three columns Eid(int primary key), Ename (varchar(20)), Age(smallint(2)) and Salary.**

**Q3. Insert following five records in the table employee**

|  |  |  |  |
| --- | --- | --- | --- |
| **Eid** | **Ename** | **Age** | **Salary** |
| **1** | **Ravindra** | **25** | **7000** |
| **2** | **Yogesh** | **22** | **4500** |
| **3** | **Kiran** | **26** | **4800** |
| **4** | **Pankaj** | **27** | **7600** |
| **5** | **Praveen** | **21** | **5000** |

**Q4. Solve the following questions (SUBQUERY)**

1. **Display name and salary of the highest paid employee**

Ans : Select ename,salary from employee where salary=(Select max(salary) from employee)

1. **Display name and salary of the lowest paid employee**

Ans : Select ename,salary from employee where salary=(Select min(salary) from employee)

**B] TRANSACTION**

1. **What is transaction?**

**Ans:** Transaction is a set of statements. First you start a transaction with **START TRANSACTION** command and then give statements, if all the statements are okay i. e. transaction is successful then you save the changes to the database on a storage device by giving **COMMIT** command**.** If anything goes wrong in a transaction is unsuccessful then you can abort (i.e. Undo) the entire transaction by **ROLLBACK** command.

Transaction concept works with engine InnoDB.

Suppose you want to add rows to our customer and deposit table, but you want to make sure that rows are added to both the table otherwise rows are not added at all. To do this transaction

**Alter table EMPLOYEE engine=InnoDB;**

With InnoDB tables, we can perform the following transaction:

**Start transaction;**

**Insert into EMPLOYEE values (6,”Nitin”, 20, 6000);**

**Commit;**

**Select \* from EMPLOYEE;**

1. **What is the use of ROLLBACK?**

**Ans:** If anything goes wrong in a transaction is unsuccessful then you can abort (i.e. Undo) the entire transaction by **ROLLBACK** command.

Transaction allows to rollback eg.

**Start transaction;**

**Insert into EMPLOYEE values (7,”Teena”, 18, 2000);**

**Rollback;**

**Select \* from EMPLOYEE;**

1. **To use transaction concept which engine should be used?**

**Ans:** Transaction concept works with engine InnoDB.

1. **What is the use of COMMIT?**

**Ans:** If all the statements are okay i.e. transaction is successful then we save the changes to the database on a storage device by giving **COMMIT** command**.**