**Experiment 3.2**

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**Branch:   CC-DevOps                                                        Section/Group: 1/B**

**Semester:   I                                                               Date of Performance: 15/12/2022**

**Subject Name: ADBMS                     Subject Code: 22CAP-647**

1. **Task to be done:**

**Simplify the following query:**

**SELECT ENAME, PNAME FROM EMP,**

**ASG, PROJ WHERE (DUR > 12 OR RESP = "Analyst") AND EMP.ENO = ASG.ENO AND (TITLE = "Elect. Eng." OR ASG.PNO < "P3") AND (DUR > 12 OR RESP NOT= "Analyst") AND ASG.PNO = PROJ.PNO**

**Query :**

1. **Create Table EMP**

**Mysql>** create table PROJ

(ENO varchar(4) primary Key,

ENAME varchar(30) not null,

TITLE varchar(30));

1. **Create Table PROJ**

**Mysql>** create table PROJ

(PNO varchar(4) primary Key,

PNAME varchar(30) not null,

BUDGET int);

1. **Create Table ASG**

**Mysql>** create table ASG

(ENO varchar(5) references EMP(eno),

PNO varchar(5) references PROJ(pno),

RESSP varchar(30),

DUR int);

1. **Insert values into EMP**

**Mysql>** insert into EMP values

("E1", “J.Doe", "Elect. Eng“),

("E2", “M.Smith", "Syst. Anal.“),

("E3", “A.Lee", "Mech. Eng“),

("E4", “J.Miller", "programmer“),

("E5", “B.Casey", "Syst. Anal“),

("E6", “L.Chu", "Elect. Eng“),

("E7", “R.Davis", "Mech. Eng“),

("E8", “J.Jones", "Syst. Anal“)

1. **Insert values into PROJ**

**Mysql>** insert into proj values

("P1","Instrumentation",150000),

("P2","Database Developer",135000),

("P3","CAD/CAM",250000),

("P4","Maintenance",310000);

1. **Insert values into ASG**

**Mysql>** insert into ASG values

("E1","P1","Manager",12), ("E2","P1","Analyst",24),

("E2","P2","Analyst",6), ("E3","P2","Consultant",10),

("E3","P4","Engineer",48), ("E4","P2","Programmer",18),

("E5","P2","Manager",24), ("E6","P4","Manager",48),

("E7","P3","Engineer",36), ("E7","P5","Engineer",23),

("E8","P3","Manager",40);

**Simplify Query :**

**MySQL>** SELECT ENAME, PNAME FROM EMP

INNER JOIN ASG ON EMP.ENO = ASG.ENO

INNER JOIN PROJ ON ASG.PNO = PROJ.PNO

WHERE (DUR > 12 OR RESP = "Analyst")

AND (TITLE = "Elect. Eng." OR ASG.PNO < "P3")

AND (DUR > 12 OR RESP NOT= "Analyst")

**In Relational**

π ENAME, PNAME (

( EMP ⨝ ASG ⨝ PROJ ) ∧ ( DUR > 12 ∨ RESP = "Analyst" )

∧ ( TITLE = "Elect. Eng." ∨ ASG.PNO < "P3" )

∧ ( DUR > 12 ∨ RESP ≠ "Analyst" ))

1. **Learning outcomes (What I have learnt):** 
   * 1. **Learn about Aggregate function**
     2. **Learn about group by clause**
     3. **Learn about having clause with aggregate functions**

**Evaluation Grid:**

|  |  |  |  |
| --- | --- | --- | --- |
| Sr. No. | Parameters | Marks Obtained | Maximum Marks |
| 1. | Demonstration and Performance  (Quiz) |  | 22 |
| 2. | Worksheet |  | 8 |