**Data modelling and database application – Project Report**

**Task 2)**

**How many employees of for a project titled "A" are involved in its plan “B”?**

SELECT COUNT(employeeID)  
FROM Employee e  
JOIN EmployeePlan ep USING (employeeID)  
JOIN Plan pl ON pl.planID = ep.planID  
JOIN Project pr.projectID = pl.projectID  
WHERE pr.projectName = 'A' AND pl.planName = 'B';

SELECT COUNT(employeeID)  
FROM Employee  
LEFT JOIN EmployeePlan ep USING (employeeID)  
WHERE ep.planID IN (  
 SELECT planID  
 FROM PLAN  
 WHERE planName = 'B'  
 AND projectID IN (  
 SELECT projectID  
 FROM project  
 WHERE projectName = 'A'  
 )  
);

**Retrieve the names of plans made for project “A” with least cost.**

**Retrieve all the employee’s name and their least working time with respect to different project.**

SELECT employeeID, activityLength  
FROM (  
 SELECT employeeID, activityLength, Plan.projectID  
 FROM PlanActivity  
 LEFT JOIN Plan USING (planID)) as tableA  
WHERE (employeeID, MAX(activityLength)) IN tableA  
GROUP BY tableA.projectID

**Retrieve all the plans for project with order of their working period.**

SELECT \*  
FROM Plan  
WHERE projectID IN (  
 SELECT projectID  
 FROM Project  
 ORDER BY StartDate  
);

# We assume here that “working period” means the project length in days, in ascending order from lowest to highest

SELECT \*  
FROM Plan  
WHERE projectID IN (  
 SELECT projectID  
 FROM Project  
 ORDER BY DATEDIFF(day, startDate, endDate))  
);