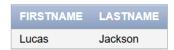NAME- SAEEL SAKHALKAR

ROLL NO -2439

Questions

1. Get Employees Who Have Worked on the Highest Budget Project
   SELECT FIRSTNAME,LASTNAME FROM EMPLOYEES WHERE EMPLOYEEID=(SELECT EMPLOYEEID FROM WORKSON WHERE PROJECTID=(SELECT PROJECTID FROM PROJECTS WHERE BUDGET = (SELECT MAX(BUDGET) FROM PROJECTS)))
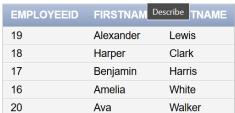
FIRSTNAME	LASTNAME
Lucas	Jackson

2. Find Clients Who Have at Least One Project
   SELECT CLIENTNAME FROM CLIENTS WHERE CLIENTID IN (SELECT DISTINCT CLIENTID FROM PROJECTS)

CLIENTNAME
ABC Corp
XYZ Ltd
Global Solutions
Tech Innovators
NextGen Enterprises

3. Retrieve Employees Who Are Not Assigned to Any Department
   SELECT EMPLOYEEID,FIRSTNAME,LASTNAME FROM EMPLOYEES WHERE EMPLOYEEID NOT IN(SELECT EMPLOYEEID FROM WORKSON)

EMPLOYEEID	FIRSTNAM Describe TNAME	
19	Alexander	Lewis
18	Harper	Clark
17	Benjamin	Harris
16	Amelia	White
20	Ava	Walker

4. Get Projects Managed by a Specific Client
   SELECT PROJECTID, PROJECTNAME
   FROM PROJECTS
   WHERE CLIENTID = (
     SELECT CLIENTID
     FROM CLIENTS
     WHERE CLIENTNAME = 'ABC Corp'
   );

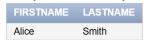| PROJECTID	PROJECTNAME
1	HR Management System
6	Mobile Banking App
11	Cloud Storage Platform

5. Retrieve Employees Working in the Same Department as a Given Employee
SELECT FIRSTNAME,LASTNAME FROM EMPLOYEES WHERE EMPLOYEEID IN (SELECT EMPLOYEEID FROM EMPLOYEEDEPARTMENTS WHERE DEPARTMENTID IN (SELECT DEPARTMENTID FROM EMPLOYEEDEPARTMENTS WHERE EMPLOYEEID IN(SELECT EMPLOYEEID FROM EMPLOYEES WHERE FIRSTNAME='John')))

FIRSTNAME	LASTNAME
John	Doe
Sophia	Jones
James	Gonzalez
Amelia	White

6. Get the Oldest Employee in the Company
SELECT FIRSTNAME,LASTNAME FROM EMPLOYEES WHERE DATEOFBIRTH=(SELECT MIN(DATEOFBIRTH) FROM EMPLOYEES)

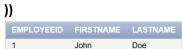| FIRSTNAME	LASTNAME
Alice	Smith

7. Retrieve Departments With No Employees
SELECT DEPARTMENTNAME FROM DEPARTMENTS WHERE DEPARTMENTID NOT IN (SELECT DEPARTMENTID FROM EMPLOYEEDEPARTMENTS)

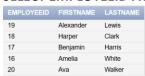| DEPARTMENTNAME |
|----------------|
| Economics |

8. Find the Employee with the Most Projects
SELECT EMPLOYEEID,FIRSTNAME,LASTNAME FROM EMPLOYEES WHERE EMPLOYEEID IN(SELECT EMPLOYEEID FROM WORKSON GROUP BY EMPLOYEEID HAVING COUNT(PROJECTID)=(SELECT MAX(COUNT(EMPLOYEEID)) FROM WORKSON GROUP BY(EMPLOYEEID)
))

EMPLOYEEID	FIRSTNAME	LASTNAME
1	John	Doe

9. Find Employees Who Have Never Worked on a Project
SELECT EMPLOYEEID,FIRSTNAME, LASTNAME FROM EMPLOYEES WHERE EMPLOYEEID NOT IN(SELECT EMPLOYEEID FROM WORKSON)
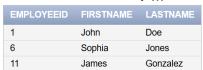
EMPLOYEEID	FIRSTNAME	LASTNAME
19	Alexander	Lewis
18	Harper	Clark
17	Benjamin	Harris
16	Amelia	White
20	Ava	Walker

10. Retrieve the Name of the Most Recent Client
SELECT CLIENTNAME,DATEJOINED FROM CLIENTS WHERE DATEJOINED=(SELECT MAX(DATEJOINED) FROM CLIENTS)

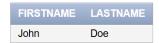| CLIENTNAME	DATEJOINED
NextGen Enterprises	01/10/2023

11. Get Employees Who Have Worked on Projects for a Specific Client

SELECT DISTINCT EMPLOYEEID,FIRSTNAME,LASTNAME FROM EMPLOYEES WHERE EMPLOYEEID IN (SELECT EMPLOYEEID FROM WORKSON WHERE PROJECTID IN (SELECT PROJECTID FROM PROJECTS WHERE CLIENTID IN (SELECT CLIENTID FROM CLIENTS WHERE CLIENTNAME='ABC Corp')))

EMPLOYEEID	FIRSTNAME	LASTNAME
1	John	Doe
6	Sophia	Jones
11	James	Gonzalez

12. Retrieve Employees Who Joined Before the Oldest Project Started

SELECT FIRSTNAME,LASTNAME FROM EMPLOYEES WHERE EMPLOYEEID IN (SELECT EMPLOYEEID FROM EMPLOYEEDEPARTMENTS WHERE STARTDATE < (SELECT STARTDATE FROM EMPLOYEEDEPARTMENTS WHERE EMPLOYEEID IN(SELECT EMPLOYEEID FROM EMPLOYEES WHERE DATEOFBIRTH=(SELECT MIN(DATEOFBIRTH) FROM EMPLOYEES))))

FIRSTNAME	LASTNAME
John	Doe

13. Find Departments Where All Employees Have Worked on at Least One Project

SELECT DEPARTMENTNAME FROM DEPARTMENTS WHERE DEPARTMENTID IN(SELECT DEPARTMENTID FROM EMPLOYEEDEPARTMENTS WHERE EMPLOYEEID IN(SELECT EMPLOYEEID FROM EMPLOYEES WHERE EMPLOYEEID NOT IN(SELECT UNIQUE EMPLOYEEID FROM WORKSON)))

DEPARTMENTNAME
Human Resources
Finance
Marketing
Operations
IT

14. Retrieve Projects That Have More Employees Than the Average

15. Get Employees Who Are the Only Ones in Their Department

SELECT FIRSTNAME,LASTNAME FROM EMPLOYEES WHERE EMPLOYEEID IN (SELECT EMPLOYEEID FROM EMPLOYEEDEPARTMENTS WHERE DEPARTMENTID IN (SELECT DEPARTMENTID FROM EMPLOYEEDEPARTMENTS GROUP BY DEPARTMENTID HAVING COUNT(*) = 1));

FIRSTNAME	LASTNAME
Robert	Brown