

PRACTICAL - 5

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CREATE DATABASE dbms;
USE dbms;

CREATE TABLE EMPLOYEE (
    emp_id INT, emp_name VARCHAR(100), job_name VARCHAR(100), manager_id INT,
    hire_date DATE, salary INT, E_Bonus INT, dep_no INT
);

INSERT INTO EMPLOYEE (emp_id, emp_name, job_name, manager_id, hire_date, salary,
E_Bonus, dep_no)
VALUES (68319, 'KAYLING', 'PRESIDENT', NULL, '1991-11-18', 6000, 300, 1001),
(66928, 'BLAZE', 'MANAGER', 68319, '1991-05-01', 2750, 200, 3001),
(67832, 'CLARE', 'MANAGER', 68319, '1991-06-09', 2550, 200, 1001),
(65646, 'JONAS', 'MANAGER', 68319, '1991-04-02', 2957, 200, 2001),
(67858, 'SCARLET', 'ANALYST', 65646, '1997-04-19', 3100, 250, 2001),
(69062, 'FRANK', 'ANALYST', 65646, '1991-12-03', 3100, 250, 2001),
(63679, 'SANDRINE', 'CLERK', 69062, '1990-12-18', 900, 150, 2001),
(64989, 'ADELYN', 'SALESMAN', 66928, '1991-02-20', 1700, 180, 3001),
(65271, 'WADE', 'SALESMAN', 66928, '1991-02-22', 1350, 180, 3001),
(66564, 'MADDEN', 'SALESMAN', 66928, '1991-09-28', 1350, 180, 3001),
(68454, 'TUCKER', 'SALESMAN', 66928, '1991-09-08', 1600, 180, 3001),
(68736, 'ADNRES', 'CLERK', 67858, '1997-05-23', 1200, 150, 2001),
(69000, 'JULIUS', 'CLERK', 66928, '1991-12-03', 1050, 150, 3001),
(69324, 'MARKER', 'CLERK', 67832, '1992-01-23', 1400, 150, 1001);

CREATE TABLE DEPARTMENT(
    deptno INT, dname VARCHAR(100), Citylocation VARCHAR(100), dCountry VARCHAR(100)
);

INSERT INTO DEPARTMENT (deptno, dname, Citylocation, dCountry)
VALUES (1001, 'Accounting', 'New York', 'United States of America'),
(2001, 'Research', 'Dallas', 'United States'),
(3001, 'Sales', 'Chicago', 'United States of America'),
(4001, 'Marketing', 'Los Angeles', 'United States');

CREATE TABLE PROJECT(
    Pno INT, Pname VARCHAR(100), PCitylocation VARCHAR(100), PCountry VARCHAR(100)
);

INSERT INTO PROJECT (Pno, Pname , PCitylocation, PCountry)
VALUES (111, 'P_1', 'New York', 'United States of America'),
(112, 'P_2', 'Dallas', 'United States'),
(113, 'P_3', 'Chicago', 'United States of America'),
(114, 'P_4', 'Denmark', 'northern Europe'),
(115, 'P_5', 'Paris', 'France'),
(116, 'P_6', 'Chicago', 'United States of America');
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-- Q1. Display all the Departments and Projects available.
SELECT dname FROM DEPARTMENT UNION SELECT Pname FROM PROJECT;

-- Q2. Display the Locations of Departments and Projects.
SELECT Citylocation FROM DEPARTMENT UNION SELECT PCitylocation FROM PROJECT;

-- Q3. Display the Project's Locations which are not the Department's Locations.
SELECT PCitylocation FROM PROJECT EXCEPT SELECT Citylocation FROM DEPARTMENT;

-- Q4. Display the Department's Locations which are also Project's Locations.
SELECT Citylocation FROM DEPARTMENT intersect SELECT PCitylocation FROM PROJECT;

-- Q5. Display the cities of United States of America in which Projects are been
designed and also display their respective Departments.
SELECT DISTINCT dname, Citylocation FROM DEPARTMENT, PROJECT WHERE (dCountry =
'United States of America' AND Citylocation = PCitylocation);

-- Q6. Display the Countries and cities for projects P_1 and P_2 & Departments
Accounting and Marketing.
SELECT PCitylocation, PCountry FROM PROJECT WHERE Pname = 'P_1' UNION SELECT
PCitylocation, PCountry FROM PROJECT WHERE Pname = 'P_2' INTERSECT
SELECT Citylocation, dCountry FROM DEPARTMENT WHERE dname = 'Accounting' UNION
SELECT Citylocation, dCountry FROM DEPARTMENT WHERE dname = 'Marketing';

-- Q7. Display those Cities which are same for Projects and Departments.
SELECT PCitylocation FROM PROJECT INTERSECT SELECT Citylocation FROM DEPARTMENT;

-- Q8. Display Project numbers and Department numbers for which country is United
States.
SELECT Pno FROM PROJECT WHERE PCountry = 'United States' UNION SELECT deptno FROM
DEPARTMENT WHERE dCountry = 'United States';

-- Q9. Find the names of the projects and Departments which have city as Chicago.
SELECT Pname FROM PROJECT WHERE PCitylocation = 'Chicago' UNION SELECT dname FROM
DEPARTMENT WHERE Citylocation = 'Chicago';

-- Q10. Display the details for projects and Departments which don't have country as
Northern Europe.
SELECT * FROM PROJECT WHERE PCountry != 'northern Europe' UNION SELECT * FROM
DEPARTMENT WHERE dCountry != 'northern Europe';

-- Q11 Get details of the Employee with the largest Salary.
SELECT * FROM EMPLOYEE WHERE salary = (SELECT MAX(salary) FROM EMPLOYEE);

-- Q12. Display the Total Salary of Employees including Bonus.
SELECT emp_name, salary + E_Bonus FROM EMPLOYEE;

-- Q13. Display the Salaries if it is increased by 3 times more than original
Salaries of Employees who work as Analyst.
SELECT emp_name, 3*salary FROM EMPLOYEE WHERE job_name = 'ANALYST';

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Q1.

dname
Accounting
Research
Sales
Marketing
P_1
P_2
P_3
P_4
P_5
P_6

Q2.

Citylocation
New York
Dallas
Chicago
Los Angeles
Denmark
Paris

Q3.

PCitylocation
Denmark
Paris

Q4.

Citylocation
New York
Dallas
Chicago

Q7.

PCitylocation
New York
Dallas
Chicago

Q6.

PCitylocation	PCountry
New York	United States of America
Los Angeles	United States

Q13.

emp_name	3*salary
SCARLET	9300
FRANK	9300

Q5.

dname	Citylocation
Accounting	New York
Sales	Chicago

Q8.

Pno
112
2001
4001

Q9.

Pname
P_3
P_6
Sales

Q12.

emp_name	salary + E_Bonus
KAYLING	6300
BLAZE	2950
CLARE	2750
JONAS	3157
SCARLET	3350
FRANK	3350
SANDRINE	1050
ADELYN	1880
WADE	1530
MADDEN	1530
TUCKER	1780
ADNRES	1350
JULIUS	1200
MARKER	1550

Q10.

Pno	Pname	PCitylocation	PCountry
111	P_1	New York	United States of America
112	P_2	Dallas	United States
113	P_3	Chicago	United States of America
115	P_5	Paris	France
116	P_6	Chicago	United States of America
1001	Accounting	New York	United States of America
2001	Research	Dallas	United States
3001	Sales	Chicago	United States of America
4001	Marketing	Los Angeles	United States

Q11.

emp_id	emp_name	job_name	manager_id	hire_date	salary	E_Bonus	dep_no
68319	KAYLING	PRESIDENT	NULL	1991-11-18	6000	300	1001