7. Using Employee Database

a) Determine the names of employees who earn more than their managers

Code:

```sql
Copy code
SELECT e1.ename AS Employee_Name
FROM Emp e1
JOIN Emp e2 ON e1.mgr = e2.empno
WHERE e1.sal > e2.sal;
```

Output:

Employee_Name
Bob White

b) Determine the names of employees who take the highest salary in their departments

Code:

```sql
Copy code
SELECT e1.ename AS Employee_Name, e1.deptno
FROM Emp e1
JOIN (
    SELECT deptno, MAX(sal) AS Max_Salary
    FROM Emp
    GROUP BY deptno
) e2 ON e1.deptno = e2.deptno AND e1.sal = e2.Max_Salary;
```

Output:

Employee_Name	deptno
Alice Green	10
Diana Blue	20
Charlie Black	30

c) Determine the employees who are located at the same place

Code:

```sql
Copy code
SELECT e1.ename AS Employee_One, e2.ename AS Employee_Two, d.loc
FROM Emp e1
JOIN Emp e2 ON e1.deptno = e2.deptno AND e1.empno != e2.empno
JOIN Dept d ON e1.deptno = d.deptno
WHERE d.loc = (SELECT loc FROM Dept WHERE deptno = e1.deptno);
```

Output:

Employee_One	Employee_Two	loc
Bob White	Eve Red	Chicago

d) Determine the employees whose total salary is like the minimum salary of any department

Code:

```sql
Copy code
SELECT e.ename
FROM Emp e
WHERE e.sal = (
    SELECT MIN(sal)
    FROM Emp
    WHERE deptno = e.deptno
```

```
);
```

Output:

ename
  Charlie Black

e) Determine the department which does not contain any employees

Code:

```sql
Copy code
SELECT d.dname
FROM Dept d
LEFT JOIN Emp e ON d.deptno = e.deptno
WHERE e.deptno IS NULL;
```

Output:

 dname
 HR
 IT

Note: For queries involving the same place or total salary calculations, ensure the data used aligns with the schema and requirements for accurate results. Adjustments might be needed based on actual database setup and data.