Employee table and data :-

```
1   CREATE TABLE employees (
2           employee_id NUMBER PRIMARY KEY,
3               first_name VARCHAR2(50),
4                   last_name VARCHAR2(50),
5                       department_id NUMBER
6   );
7
```

Results | Explain | Describe | Saved SQL | History

Table created.

0.02 seconds

```
1   SELECT * FROM employees;
```

Results | Explain | Describe | Saved SQL | History

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	DEPARTMENT_ID
2	Jane	Smith	20
1	John	Doe	10
3	Alice	Brown	30

3 rows returned in 0.01 seconds Download

Department table and data:-

```
1  CREATE TABLE departments (
2          department_id NUMBER PRIMARY KEY,
3              department_name VARCHAR2(50),
4                  location_id NUMBER
5  );
6
```

Results | Explain | Describe | Saved SQL | History

Table created.

0.01 seconds

```
1  SELECT * FROM departments;
```

Results | Explain | Describe | Saved SQL | History

DEPARTMENT_ID	DEPARTMENT_NAME	LOCATION_ID
10	Sales	100
20	HR	200
30	Finance	300
50	Marketing	400

Locations table and data:-

```
1   CREATE TABLE locations (
2           location_id NUMBER PRIMARY KEY,
3               city VARCHAR2(50)
4   );
5
```

Results | Explain | Describe | Saved SQL | History

Table created.

0.01 seconds

```
1   SELECT * FROM locations;
2
```

Results | Explain | Describe | Saved SQL | History

LOCATION_ID	CITY
200	San Francisco
100	New York
400	Los Angeles
300	Chicago

4 rows returned in 0.00 seconds Download

Create a cross-join that displays the last name and department name from the employees and departments tables.

```sql
SELECT e.last_name, d.department_name
FROM employees e
CROSS JOIN departments d;
```

Results | Explain | Describe | Saved SQL | History

LAST_NAME	DEPARTMENT_NAME
Smith	Sales
Smith	HR
Smith	Finance
Smith	Marketing
Doe	Sales
Doe	HR
Doe	Finance
Doe	Marketing
Brown	Sales
Brown	HR

Create a query that uses a natural join to join the departments table and the locations table. Display the department id, department name, location id, and city.

```sql
SELECT department_id, department_name, location_id, city
FROM departments
NATURAL JOIN locations;
```

Results | Explain | Describe | Saved SQL | History

DEPARTMENT_ID	DEPARTMENT_NAME	LOCATION_ID	CITY
10	Sales	100	New York
20	HR	200	San Francisco
30	Finance	300	Chicago
50	Marketing	400	Los Angeles

4 rows returned in 0.01 seconds Download

Create a query that uses a natural join to join the departments table and the locations table. Restrict the output to only department IDs of 20 and 50. Display the department id, department name, location id, and city

```sql
SELECT department_id, department_name, location_id, city
FROM departments
NATURAL JOIN locations
WHERE department_id IN (20, 50);
```

Results | Explain | Describe | Saved SQL | History

DEPARTMENT_ID	DEPARTMENT_NAME	LOCATION_ID	CITY
20	HR	200	San Francisco
50	Marketing	400	Los Angeles

2 rows returned in 0.01 seconds Download