

DATABASE PROGRAMMING WITH SQL

7.1 Oracle Equijoin and Cartesian Product

```
CREATE TABLE employ(  
    eno VARCHAR(14),  
    ename VARCHAR(14),  
    eadhress VARCHAR(15),  
    epno VARCHAR(15),  
    depno VARCHAR(14),  
    depname VARCHAR(14),  
    jobid VARCHAR(10),  
    salary VARCHAR(10),  
    create_date DATE DEFAULT SYSDATE);
```

ENO	ENAME	EADHRESS	EPNO	DEPNO	DEPNAME	JOBID	SALARY	CREATE_DATE
03	mahat	chennai	684	3456433	ece	5698	700000	26-Jul-2024
01	deepa	tpt	3256	3456433	cse	9954	2568752	26-Jul-2024
04	mahath	chennai	5564	3456433	it	22313	3300000	26-Jul-2024
05	mahi	chenai	7523	3456433	ai	68876	3695000	26-Jul-2024

```
CREATE TABLE jobs (  
    job_id VARCHAR(10) PRIMARY KEY,  
    job_title VARCHAR(50) NOT NULL,  
    min_salary DECIMAL(8, 2),  
    max_salary DECIMAL(8, 2)  
);
```

JOB_ID	JOB_TITLE	MIN_SALARY	MAX_SALARY
22313	CEO	100000	300000
9954	manager	45000	90000
5698	software	50000	70000

PROPRIETARY JOINS:

SELECT employ.ename, jobs.job_title

FROM employ,jobs

WHERE employ.jobid=jobs.job_id;

ENAME	JOB_TITLE
mahat	software
deepa	manager
mahath	CEO

3 rows returned in 0.00 seconds [Download](#)

EQUIJOIN:

SELECT employ.ename, employ.jobid, jobs.job_title

FROM employ, jobs

WHERE employ.jobid = jobs.job_id;

```

1  SELECT employ.ename, employ.jobid, jobs.job_title
2  FROM employ, jobs
3  WHERE employ.jobid = jobs.job_id;

```

Results	Explain	Describe	Saved SQL	History
ENAME	JOBID	JOB_TITLE		
mahat	5698	software		
deepa	9954	manager		
mahath	22313	CEO		

3 rows returned in 0.01 seconds [Download](#)

ALIASES:

SELECT ename, e.jobid, job_title

FROM employ e, jobs j

WHERE e.jobid = j.job_id

AND depno=3456433;

```

1 SELECT ename, e.jobid, job_title
2 FROM employ e, jobs j
3 WHERE e.jobid = j.job_id
4 AND depno=3456433]

```

ENAME	JOBID	JOB_TITLE
mahat	5698	software
deepa	9954	manager
mahath	22515	CEO

3 rows returned in 0.00 seconds [Download](#)

CARTESIAN PRODUCT JOIN:

```

SELECT employ.ename,jobs.job_title
FROM employ,jobs;

```

ENAME	JOB_TITLE
mahat	CEO
deepa	CEO
mahath	CEO
mahi	CEO
mahat	manager
deepa	manager
mahath	manager
mahi	manager
mahat	software
deepa	software
mahath	software
mahi	software

JOIN:

```

SELECT last_name, location
FROM Employees e, departments d, jobs j
WHERE e.job_id = j.job_id
AND e.department_id = d.department_id;

```

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```

1  SELECT last_name, location
2  FROM Employees e, departments d, jobs j
3  WHERE e.job_id = j.job_id
4  AND e.department_id = d.department_id;

```

Results Explain Describe Saved SQL History

LAST_NAME	LOCATION
Doe	Chicago

1 rows returned in 0.01 seconds [Download](#)

DP 7.2:

Nonequijoin:

SELECT ename,salary,grade,lowсал,

highсал

FROM employ,job_grade

WHERE (salary BETWEEN lowсал AND highсал);

1 SELECT ename,salary,grade,lowсал,

2 highсал

3 FROM employ,job_grade

4 WHERE (salary BETWEEN lowсал AND highсал);

Results Explain Describe Saved SQL History

ENAME	SALARY	GRADE	LOWSAL	HIGHSAL
mahat	700000	B	30000	80000
mahi	3695000	D	3500001	4000000
mahi	3695000	B	30000	80000
mahath	3300000	D	3000001	3500000
mahath	3300000	B	30000	80000
deepa	2568752	A	1000	2999

6 rows returned in 0.00 seconds [Download](#)