

DAY4 LEARNING

JOIN

1. JOIN =

```
SELECT A.AGENT_NAME, C.CUSTOMER_NAME, C.CUSTOMER_AREA FROM AGENTS A JOIN CUSTOMERS C ON A.WORKING_AREA=C.CUSTOMER_AREA;
```

Results Explain Describe Saved SQL History

AGENT_NAME	CUSTOMER_NAME	CUSTOMER_AREA
AGENT2	CUSTOMER1	CHENNAI
AGENT1	CUSTOMER1	CHENNAI
AGENT2	CUSTOMER2	CHENNAI
AGENT1	CUSTOMER2	CHENNAI
AGENT2	CUSTOMER3	CHENNAI
AGENT1	CUSTOMER3	CHENNAI
AGENT4	CUSTOMER4	BANGLORE
AGENT3	CUSTOMER4	BANGLORE
AGENT4	CUSTOMER5	BANGLORE
AGENT3	CUSTOMER5	BANGLORE

10 rows returned in 0.02 seconds

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2. JOIN <> (NOT EQUAL)

```
SELECT AGENTS.AGENT_NAME, CUSTOMERS.CUSTOMER_NAME, CUSTOMERS.CUSTOMER_AREA FROM AGENTS JOIN CUSTOMERS ON AGENTS.WORKING_AREA <> CUSTOMERS.CUSTOMER_AREA ORDER BY AGENT_NAME;
```

Results Explain Describe Saved SQL History

AGENT_NAME	CUSTOMER_NAME	CUSTOMER_AREA
AGENT1	CUSTOMER5	BANGLORE
AGENT1	CUSTOMER4	BANGLORE
AGENT2	CUSTOMER4	BANGLORE
AGENT2	CUSTOMER5	BANGLORE
AGENT3	CUSTOMER3	CHENNAI
AGENT3	CUSTOMER1	CHENNAI
AGENT3	CUSTOMER2	CHENNAI
AGENT4	CUSTOMER3	CHENNAI
AGENT4	CUSTOMER1	CHENNAI
AGENT4	CUSTOMER2	CHENNAI

10 rows returned in 0.01 seconds

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3. LEFT OUTER JOIN

```
SELECT * FROM AGENTS, CUSTOMERS WHERE AGENTS.WORKING_AREA = CUSTOMERS.CUSTOMER_AREA(+);
```

Results Explain Describe Saved SQL History

AGENT_CODE	AGENT_NAME	WORKING_AREA	CUSTOMER_CODE	CUSTOMER_NAME	CUSTOMER_AREA
A102	AGENT2	CHENNAI	C101	CUSTOMER1	CHENNAI
A101	AGENT1	CHENNAI	C101	CUSTOMER1	CHENNAI
A102	AGENT2	CHENNAI	C102	CUSTOMER2	CHENNAI
A101	AGENT1	CHENNAI	C102	CUSTOMER2	CHENNAI
A102	AGENT2	CHENNAI	C103	CUSTOMER3	CHENNAI
A101	AGENT1	CHENNAI	C103	CUSTOMER3	CHENNAI
A104	AGENT4	BANGLORE	C104	CUSTOMER4	BANGLORE
A103	AGENT3	BANGLORE	C104	CUSTOMER4	BANGLORE
A104	AGENT4	BANGLORE	C105	CUSTOMER5	BANGLORE
A103	AGENT3	BANGLORE	C105	CUSTOMER5	BANGLORE

More than 10 rows available. Increase rows selector to view more rows.

10 rows returned in 0.01 seconds

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4. RIGHT OUTER JOIN

```
SELECT * FROM AGENTS, CUSTOMERS WHERE AGENTS.WORKING_AREA(+) = CUSTOMERS.CUSTOMER_AREA;
```

Results Explain Describe Saved SQL History

AGENT_CODE	AGENT_NAME	WORKING_AREA	CUSTOMER_CODE	CUSTOMER_NAME	CUSTOMER_AREA
A103	AGENT3	BANGLORE	C105	CUSTOMER5	BANGLORE
A103	AGENT3	BANGLORE	C104	CUSTOMER4	BANGLORE
A104	AGENT4	BANGLORE	C105	CUSTOMER5	BANGLORE
A104	AGENT4	BANGLORE	C104	CUSTOMER4	BANGLORE
A101	AGENT1	CHENNAI	C103	CUSTOMER3	CHENNAI
A101	AGENT1	CHENNAI	C102	CUSTOMER2	CHENNAI
A101	AGENT1	CHENNAI	C101	CUSTOMER1	CHENNAI
A102	AGENT2	CHENNAI	C103	CUSTOMER3	CHENNAI
A102	AGENT2	CHENNAI	C102	CUSTOMER2	CHENNAI
A102	AGENT2	CHENNAI	C101	CUSTOMER1	CHENNAI

More than 10 rows available. Increase rows selector to view more rows.
10 rows returned in 0.01 seconds Download

5. FULL JOIN

```
SELECT * FROM AGENTS FULL OUTER JOIN CUSTOMERS ON AGENTS.WORKING_AREA = CUSTOMERS.CUSTOMER_AREA;
```

Results Explain Describe Saved SQL History

AGENT_CODE	AGENT_NAME	WORKING_AREA	CUSTOMER_CODE	CUSTOMER_NAME	CUSTOMER_AREA
A102	AGENT2	CHENNAI	C101	CUSTOMER1	CHENNAI
A101	AGENT1	CHENNAI	C101	CUSTOMER1	CHENNAI
A102	AGENT2	CHENNAI	C102	CUSTOMER2	CHENNAI
A101	AGENT1	CHENNAI	C102	CUSTOMER2	CHENNAI
A102	AGENT2	CHENNAI	C103	CUSTOMER3	CHENNAI
A101	AGENT1	CHENNAI	C103	CUSTOMER3	CHENNAI
A104	AGENT4	BANGLORE	C104	CUSTOMER4	BANGLORE
A103	AGENT3	BANGLORE	C104	CUSTOMER4	BANGLORE
A104	AGENT4	BANGLORE	C105	CUSTOMER5	BANGLORE
A103	AGENT3	BANGLORE	C105	CUSTOMER5	BANGLORE
-	-	-	C106	CUSTOMER6	VELLORE
A105	AGENT5	DELHI	-	-	-

12 rows returned in 0.00 seconds Download

6. SELF JOIN

```
SELECT A.AGENT_CODE, B.AGENT_NAME FROM AGENTS A, AGENTS B WHERE A.WORKING_AREA = B.WORKING_AREA;
```

Results Explain Describe Saved SQL History

AGENT_CODE	AGENT_NAME
A104	AGENT3
A103	AGENT3
A104	AGENT4
A103	AGENT4
A105	AGENT5
A102	AGENT1
A101	AGENT1
A102	AGENT2
A101	AGENT2

9 rows returned in 0.01 seconds Download

7. CROSS JOIN

SELECT * FROM AGENTS CROSS JOIN CUSTOMERS;					
Results	Explain	Describe	Saved SQL	History	
AGENT_CODE	AGENT_NAME	WORKING_AREA	CUSTOMER_CODE	CUSTOMER_NAME	CUSTOMER_AREA
A103	AGENT3	BANGLORE	C101	CUSTOMER1	CHENNAI
A103	AGENT3	BANGLORE	C102	CUSTOMER2	CHENNAI
A103	AGENT3	BANGLORE	C103	CUSTOMER3	CHENNAI
A103	AGENT3	BANGLORE	C104	CUSTOMER4	BANGLORE
A103	AGENT3	BANGLORE	C105	CUSTOMER5	BANGLORE
A103	AGENT3	BANGLORE	C106	CUSTOMER6	VELLORE
A104	AGENT4	BANGLORE	C101	CUSTOMER1	CHENNAI
A104	AGENT4	BANGLORE	C102	CUSTOMER2	CHENNAI
A104	AGENT4	BANGLORE	C103	CUSTOMER3	CHENNAI
A104	AGENT4	BANGLORE	C104	CUSTOMER4	BANGLORE
A104	AGENT4	BANGLORE	C105	CUSTOMER5	BANGLORE
A104	AGENT4	BANGLORE	C106	CUSTOMER6	VELLORE
A105	AGENT5	DELHI	C101	CUSTOMER1	CHENNAI
A105	AGENT5	DELHI	C102	CUSTOMER2	CHENNAI
A105	AGENT5	DELHI	C103	CUSTOMER3	CHENNAI
A105	AGENT5	DELHI	C104	CUSTOMER4	BANGLORE
A105	AGENT5	DELHI	C105	CUSTOMER5	BANGLORE
A105	AGENT5	DELHI	C106	CUSTOMER6	VELLORE
A101	AGENT1	CHENNAI	C101	CUSTOMER1	CHENNAI
A101	AGENT1	CHENNAI	C102	CUSTOMER2	CHENNAI
More than 20 rows available. Increase rows selector to view more rows.					
20 rows returned in 0.01 seconds Download					

8. NATURAL JOIN

SELECT * FROM AGENTS NATURAL JOIN CUSTOMERS;					
Results	Explain	Describe	Saved SQL	History	
AGENT_CODE	AGENT_NAME	WORKING_AREA	CUSTOMER_CODE	CUSTOMER_NAME	CUSTOMER_AREA
A103	AGENT3	BANGLORE	C101	CUSTOMER1	CHENNAI
A103	AGENT3	BANGLORE	C102	CUSTOMER2	CHENNAI
A103	AGENT3	BANGLORE	C103	CUSTOMER3	CHENNAI
A103	AGENT3	BANGLORE	C104	CUSTOMER4	BANGLORE
A103	AGENT3	BANGLORE	C105	CUSTOMER5	BANGLORE
A103	AGENT3	BANGLORE	C106	CUSTOMER6	VELLORE
A104	AGENT4	BANGLORE	C101	CUSTOMER1	CHENNAI
A104	AGENT4	BANGLORE	C102	CUSTOMER2	CHENNAI
A104	AGENT4	BANGLORE	C103	CUSTOMER3	CHENNAI
A104	AGENT4	BANGLORE	C104	CUSTOMER4	BANGLORE
A104	AGENT4	BANGLORE	C105	CUSTOMER5	BANGLORE
A104	AGENT4	BANGLORE	C106	CUSTOMER6	VELLORE
A105	AGENT5	DELHI	C101	CUSTOMER1	CHENNAI
A105	AGENT5	DELHI	C102	CUSTOMER2	CHENNAI
A105	AGENT5	DELHI	C103	CUSTOMER3	CHENNAI
A105	AGENT5	DELHI	C104	CUSTOMER4	BANGLORE
A105	AGENT5	DELHI	C105	CUSTOMER5	BANGLORE
A105	AGENT5	DELHI	C106	CUSTOMER6	VELLORE
A101	AGENT1	CHENNAI	C101	CUSTOMER1	CHENNAI
A101	AGENT1	CHENNAI	C102	CUSTOMER2	CHENNAI
A101	AGENT1	CHENNAI	C103	CUSTOMER3	CHENNAI
A101	AGENT1	CHENNAI	C104	CUSTOMER4	BANGLORE
A101	AGENT1	CHENNAI	C105	CUSTOMER5	BANGLORE
A101	AGENT1	CHENNAI	C106	CUSTOMER6	VELLORE
A102	AGENT2	CHENNAI	C101	CUSTOMER1	CHENNAI
A102	AGENT2	CHENNAI	C102	CUSTOMER2	CHENNAI
A102	AGENT2	CHENNAI	C103	CUSTOMER3	CHENNAI
A102	AGENT2	CHENNAI	C104	CUSTOMER4	BANGLORE
A102	AGENT2	CHENNAI	C105	CUSTOMER5	BANGLORE
A102	AGENT2	CHENNAI	C106	CUSTOMER6	VELLORE
30 rows returned in 0.01 seconds Download					

SUB QUERIES

```
SELECT * FROM CUSTOMERS WHERE CUSTOMER_AREA = (SELECT WORKING_AREA FROM AGENTS WHERE AGENT_CODE = 'A101');
```

Results Explain Describe Saved SQL History

CUSTOMER_CODE	CUSTOMER_NAME	CUSTOMER_AREA
C101	CUSTOMER1	CHENNAI
C102	CUSTOMER2	CHENNAI
C103	CUSTOMER3	CHENNAI

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