

Create two tables(like Employee--empId, name, zipcode) and Address table--(zipcode, city, country)Define joins with different types:

Table creation and rows insertion:

The screenshot shows the DBeaver 22.2.0 interface with a SQL script editor. The script contains the following SQL statements:

```
CREATE TABLE ANS_EMPLOYEE1(  
    EMP_ID INT,  
    NAME VARCHAR(50),  
    ZIPCODE INT);  
  
CREATE TABLE ANS_ADDRESS(  
    ZIPCODE INT,  
    CITY VARCHAR(20),  
    COUNTRY VARCHAR(10));  
  
INSERT INTO ANS_ADDRESS VALUES(456434, 'STAVENGER', 'NORWAY'),  
(676434, 'MANGALORE', 'INDIA'),  
(856434, 'SEATTLE', 'USA'),  
(213434, 'NEWYORK', 'USA');  
  
INSERT INTO ANS_EMPLOYEE1 VALUES  
(101, 'JOHN', 456434),  
(102, 'MARY', 856434),  
(103, 'RAMYA', 676434),  
(104, 'RITHA', 856434),  
(105, 'KELVIN', 213434),  
(106, 'JOSEPH', 213434),  
(107, 'NITHYA', 676434),  
(108, 'LILLY', 456434),  
(109, 'CLIVE', 226434);  
  
SELECT * FROM ANS_EMPLOYEE1  
SELECT * FROM ANS_ADDRESS  
  
CREATE TABLE ANS_EMPLOYEE1(  
    EMP_ID INT,
```

The Database Navigator on the left shows a list of tables including ANS_SALES_YR_2020, ANS_SALES_YR_2021, ANS_SALES_YR_2022, ANS_SEQUENCE_STUD, ANS_STORE1, ANS_STUDENT, ANS_STUD_DETAILS, ANS_STUD_DETAILS2, ANS_STUD_F, ANS_STUD_FD, ANS_STUD_P, ANS_STUD_SOURCE, ANS_Source1EMP, ANS_Source2EMP, ANS_Source3EMP, ANS_SourceEMP, ANS_TARGET_EMP, AN_Employee, and AN_EMP.

The screenshot shows the DBeaver 22.2.0 interface with the results of a SQL query displayed in a grid. The query is:

```
SELECT * FROM ANS_EMPLOYEE1
```

The results grid shows the following data:

EMP_ID	NAME	ZIPCODE
101	JOHN	456434
102	MARY	856434
103	RAMYA	676434
104	RITHA	856434
105	KELVIN	213434
106	JOSEPH	213434
107	NITHYA	676434
108	LILLY	456434
109	CLIVE	226434

The status bar at the bottom indicates that 9 rows were fetched in 170ms on 2022-09-21 at 14:24:50.

DBBeaver 22.2.0 - <dlithe> Script-5

File Edit Navigate Search SQL Editor Database Window Help

SQL Commit Rollback Auto dlithe dbo@dlithe

Database Navigator

Enter a part of object name here

- ANS_SALES_YR_2020
- ANS_SALES_YR_2021
- ANS_SALES_YR_2022
- ANS_SEQUENCE_STUD
- ANS_STORE1
- ANS_STUDENT
- ANS_STUD_DETAILS
- ANS_STUD_DETAILS2
- ANS_STUD_F
- ANS_STUD_FD
- ANS_STUD_P
- ANS_STUD_SOURCE
- ANS_Source1EMP
- ANS_Source2EMP
- ANS_Source3EMP
- ANS_SourceEMP
- ANS_TARGET_EMP
- AN_Employee
- AN_Emp

Project - General

Name DataSource

- Bookmarks
- Diagrams
- Scripts

```

--ANS_EMPLOYEE1
(106,'JOSEPH',213434),
(107,'NITHYA',676434),
(108,'LILLY',456434),
(109,'CLIVE',226434);

SELECT * FROM ANS_EMPLOYEE1
SELECT * FROM ANS_ADDRESS

```

Results 1 x

SELECT * FROM ANS_ADDRESS

ZIPCODE	CITY	COUNTRY
456,434	STAVENGER	NORWAY
676,434	MANGALORE	INDIA
856,434	SEATTLE	USA
213,434	NEWYORK	USA

CITY: varchar(20) (Read-only: No corresponding table column)

Save Cancel Script Smart Insert 200 4 Rows: 1 4 row(s) fetched - 355ms, on 2022-09-21 at 14:25:07

IST en Writable 143 : 1 [26] Set: 26 | 1

82°F Cloudy 2:25 PM 9/21/2022

Inner Join

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File Edit Navigate Search SQL Editor Database Window Help

SQL Commit Rollback Auto dlithe dbo@dlithe

Database Navigator

Enter a part of object name here

- ANS_SALES_YR_2020
- ANS_SALES_YR_2021
- ANS_SALES_YR_2022
- ANS_SEQUENCE_STUD
- ANS_STORE1
- ANS_STUDENT
- ANS_STUD_DETAILS
- ANS_STUD_DETAILS2
- ANS_STUD_F
- ANS_STUD_FD
- ANS_STUD_P
- ANS_STUD_SOURCE
- ANS_Source1EMP
- ANS_Source2EMP
- ANS_Source3EMP
- ANS_SourceEMP
- ANS_TARGET_EMP
- AN_Employee
- AN_Emp

Project - General

Name DataSource

- Bookmarks
- Diagrams
- Scripts

```

--INNER JOIN--
SELECT E.EMP_ID,E.NAME,A.CITY,A.COUNTRY
FROM ANS_EMPLOYEE1 AS E
INNER JOIN ANS_ADDRESS A
ON E.ZIPCODE=A.ZIPCODE;

```

Results 1 x

SELECT E.EMP_ID,E.NAME,A.CITY,A.COUNTRY

EMP_ID	NAME	CITY	COUNTRY
101	JOHN	STAVENGER	NORWAY
108	LILLY	STAVENGER	NORWAY
103	RAMYA	MANGALORE	INDIA
107	NITHYA	MANGALORE	INDIA
102	MARY	SEATTLE	USA
104	RITHA	SEATTLE	USA
105	KELVIN	NEWYORK	USA
106	JOSEPH	NEWYORK	USA

Save Cancel Script Smart Insert 200 8 Rows: 1 8 row(s) fetched - 435ms (5ms fetch), on 2022-09-21

IST en Writable 156 : 15 : 3138 Set: 0 | 0

82°F Cloudy 2:24 PM 9/21/2022

Left Join

The screenshot shows the DBeaver 22.2.0 interface with a SQL script editor. The script contains two queries. The first query is a Left Join between `ANS_EMPLOYEE1` and `ANS_ADDRESS` on `ZIPCODE`. The second query is a Left Join between `ANS_EMPLOYEE1` and `ANS_ADDRESS` on `ZIPCODE`. The results of the first query are displayed in a table with 9 rows.

```
SELECT E.EMP_ID,E.NAME,A.CITY,A.COUNTRY
FROM ANS_EMPLOYEE1 AS E
INNER JOIN ANS_ADDRESS A
ON E.ZIPCODE=A.ZIPCODE;
```

```
-- LEFT JOIN --
SELECT E.EMP_ID,E.NAME,A.CITY,A.COUNTRY
FROM ANS_EMPLOYEE1 AS E
LEFT JOIN ANS_ADDRESS A
ON E.ZIPCODE=A.ZIPCODE;
```

EMP_ID	NAME	CITY	COUNTRY
101	JOHN	STAVANGER	NORWAY
102	MARY	SEATTLE	USA
103	RAMYA	MANGALORE	INDIA
104	RITHA	SEATTLE	USA
105	KELVIN	NEWYORK	USA
106	JOSEPH	NEWYORK	USA
107	NITHYA	MANGALORE	INDIA
108	LILLY	STAVANGER	NORWAY
109	CLIVE	[NULL]	[NULL]

Right Join

The screenshot shows the DBeaver 22.2.0 interface with a SQL script editor. The script contains a Right Join query between `ANS_EMPLOYEE1` and `ANS_ADDRESS` on `ZIPCODE`. The results of the query are displayed in a table with 8 rows.

```
-- RIGHT JOIN --
SELECT E.EMP_ID,E.NAME,A.CITY,A.COUNTRY
FROM ANS_EMPLOYEE1 AS E
RIGHT JOIN ANS_ADDRESS A
ON E.ZIPCODE=A.ZIPCODE;
```

EMP_ID	NAME	CITY	COUNTRY
101	JOHN	STAVANGER	NORWAY
108	LILLY	STAVANGER	NORWAY
103	RAMYA	MANGALORE	INDIA
107	NITHYA	MANGALORE	INDIA
102	MARY	SEATTLE	USA
104	RITHA	SEATTLE	USA
105	KELVIN	NEWYORK	USA
106	JOSEPH	NEWYORK	USA

Full Join

The screenshot shows the DBeaver 22.2.0 interface with a SQL script editor containing a Full Join query. The query joins the `ANS_EMPLOYEE1` table (aliased as `E`) with the `ANS_ADDRESS` table (aliased as `A`) on the condition `E.ZIPCODE=A.ZIPCODE`. The results pane displays 9 rows of data.

```
-- FULL JOIN --  
SELECT E.EMP_ID, E.NAME, A.CITY, A.COUNTRY  
FROM ANS_EMPLOYEE1 AS E  
FULL JOIN ANS_ADDRESS A  
ON E.ZIPCODE=A.ZIPCODE;
```

EMP_ID	NAME	CITY	COUNTRY
101	JOHN	STAVENGER	NORWAY
102	MARY	SEATTLE	USA
103	RAMYA	MANGALORE	INDIA
104	RITHA	SEATTLE	USA
105	KELVIN	NEWYORK	USA
106	JOSEPH	NEWYORK	USA
107	NITHYA	MANGALORE	INDIA
108	LILLY	STAVENGER	NORWAY
109	CLIVE	[NULL]	[NULL]

Cross Join

The screenshot shows the DBeaver 22.2.0 interface with a SQL script editor containing a Cross Join query. The query joins the `ANS_EMPLOYEE1` table (aliased as `E`) with the `ANS_ADDRESS` table (aliased as `A`) without any join condition. The results pane displays 36 rows of data, which is the Cartesian product of the two tables.

```
-- CROSS JOIN --  
SELECT E.EMP_ID, E.NAME, A.CITY, A.COUNTRY  
FROM ANS_EMPLOYEE1 AS E, ANS_ADDRESS A ; ----RETURNS 36 ROWS
```

EMP_ID	NAME	CITY	COUNTRY
101	JOHN	STAVENGER	NORWAY
102	MARY	STAVENGER	NORWAY
103	RAMYA	STAVENGER	NORWAY
104	RITHA	STAVENGER	NORWAY
105	KELVIN	STAVENGER	NORWAY
106	JOSEPH	STAVENGER	NORWAY
107	NITHYA	STAVENGER	NORWAY
108	LILLY	STAVENGER	NORWAY
109	CLIVE	STAVENGER	NORWAY
101	JOHN	MANGALORE	INDIA
102	MARY	MANGALORE	INDIA
103	RAMYA	MANGALORE	INDIA
104	RITHA	MANGALORE	INDIA
105	KELVIN	MANGALORE	INDIA
106	JOSEPH	MANGALORE	INDIA
107	NITHYA	MANGALORE	INDIA
108	LILLY	MANGALORE	INDIA
109	CLIVE	MANGALORE	INDIA
101	JOHN	SEATTLE	USA
102	MARY	SEATTLE	USA