

select ename || ' ' || hiredate AS empHiredate from emp;

The screenshot shows the pgAdmin 4 web interface. The left sidebar displays the database structure, including the 'employee' database and its 'postgres' schema. The main window shows the 'Query Editor' with the following SQL query:

```
1 select ename || ' ' || hiredate AS empHiredate from emp;
```

The 'Data Output' tab is active, displaying the results of the query. The results are as follows:

empHiredate
1 Mayur 2010-06-03
2 Ashish 1998-10-19
3 mayur 2011-08-10
4 Sanket 2012-03-06
5 Faizan 1999-10-05
6 Ashish 2005-12-08
7 ashwini 1958-06-...
8 Aditya 1978-05-03
9 Shradha 2005-0...
10 Akshay 0209-06-09
11 Varsha 2004-06-05

JOIN OPERATION ON FOLLOWING TABLE

Student_data

	id [PK] integer	fname text	lname text	email text	per integer	p_year integer
1	1	Mayur	Khalkar	khalkarmay...	75	2014
2	2	Sanket	Nimase	sanketnima...	76	2016
3	3	Ashish	Gaikwad	ashishgaik...	85	2014
4	4	Amruta	Nangare	amrutanan...	65	2016
5	5	Varsha	Sangale	sangalevar...	76	2018
6	6	Shradha	Jadhav	jadhavshra...	85	2013

address

	pin [PK] integer	id integer	state text
1	422608	5	maharashtra
2	423605	1	Gujrat
3	423606	3	Panjab

INNER JOIN

select * from student_data inner join address on student_data.id = address.id;

	id integer	fname text	lname text	email text	per integer	p_year integer	pin integer	id integer	state text
1	1	Mayur	Khalkar	khalkarmay...	75	2014	423605	1	Gujrat
2	3	Ashish	Gaikwad	ashishgaik...	85	2014	423606	3	Panjab
3	5	Varsha	Sangale	sangalevar...	76	2018	422608	5	maharashtra

Left Join

```
select * from student_data left join address on student_data.id = address.id;
```

The screenshot shows the pgAdmin 4 interface. The Query Editor contains the following SQL query:

```
1 select * from student_data left join address on student_data.id = address.id;
```

The Data Output tab displays the results of the query. The table has 11 columns: id (integer), fname (text), lname (text), email (text), per (integer), p_year (integer), pin (integer), id (integer), and state (text). The results show 6 rows of data, where the first 5 rows have matching addresses and the 6th row has null values for the address columns.

	id integer	fname text	lname text	email text	per integer	p_year integer	pin integer	id integer	state text
1	1	Mayur	Khalkar	khalkarmay...	75	2014	423605	1	Gujrat
2	2	Sanket	Nimase	sanketnima...	76	2016	[null]	[null]	[null]
3	3	Ashish	Gaikwad	ashishgaik...	85	2014	423606	3	Panjab
4	4	Amruta	Nangare	amrutanan...	65	2016	[null]	[null]	[null]
5	5	Varsha	Sangale	sangalevar...	76	2018	422608	5	maharashtra
6	6	Shraddha	Jadhav	jadhavshra...	85	2013	[null]	[null]	[null]

Right Join

```
select * from student_data right join address on student_data.id = address.id;
```

The screenshot shows the pgAdmin 4 interface. The Query Editor contains the following SQL query:

```
1 select * from student_data right join address on student_data.id = address.id;
```

The Data Output tab displays the results of the query. The table has 11 columns: id (integer), fname (text), lname (text), email (text), per (integer), p_year (integer), pin (integer), id (integer), and state (text). The results show 3 rows of data, where the first 2 rows have matching students and the 3rd row has null values for the student columns.

	id integer	fname text	lname text	email text	per integer	p_year integer	pin integer	id integer	state text
1	1	Mayur	Khalkar	khalkarmay...	75	2014	423605	1	Gujrat
2	3	Ashish	Gaikwad	ashishgaik...	85	2014	423606	3	Panjab
3	5	Varsha	Sangale	sangalevar...	76	2018	422608	5	maharashtra

Successfully run. Total query runtime: 212 msec. 3 rows affected.

FULL OUTER JOIN

```
select * from student_data full outer join address on student_data.id = address.id;
```

The screenshot shows the pgAdmin 4 interface. The Query Editor contains the following SQL query:

```
1 select * from student_data full outer join address on student_data.id = address.id;
```

The Data Output tab displays the results of the query. The table has 11 columns: id (integer), fname (text), lname (text), email (text), per (integer), p_year (integer), pin (integer), id (integer), and state (text). The results are as follows:

id	fname	lname	email	per	p_year	pin	id	state
1	Mayur	Khalkar	khalkarmay...	75	2014	423605	1	Gujrat
2	Sanket	Nimase	sanketnima...	76	2016	[null]	[null]	[null]
3	Ashish	Gaikwad	ashishgaik...	85	2014	423606	3	Panjab
4	Amruta	Nangare	amrutanan...	65	2016	[null]	[null]	[null]
5	Varsha	Sangale	sangalevar...	76	2018	422608	5	maharashtra
6	Shraddha	Jadhav	jadhavshra...	85	2013	[null]	[null]	[null]

FULL JOIN

```
select * from student_data full join address on student_data.id = address.id;
```

The screenshot shows the pgAdmin 4 interface. The Query Editor contains the following SQL query:

```
1 select * from student_data full join address on student_data.id = address.id;
```

The Data Output tab displays the results of the query. The table has 11 columns: id (integer), fname (text), lname (text), email (text), per (integer), p_year (integer), pin (integer), id (integer), and state (text). The results are as follows:

id	fname	lname	email	per	p_year	pin	id	state
1	Mayur	Khalkar	khalkarmay...	75	2014	423605	1	Gujrat
2	Sanket	Nimase	sanketnima...	76	2016	[null]	[null]	[null]
3	Ashish	Gaikwad	ashishgaik...	85	2014	423606	3	Panjab
4	Amruta	Nangare	amrutanan...	65	2016	[null]	[null]	[null]
5	Varsha	Sangale	sangalevar...	76	2018	422608	5	maharashtra
6	Shraddha	Jadhav	jadhavshra...	85	2013	[null]	[null]	[null]

Successfully run. Total query runtime: 252 msec. 6 rows affected.

Cross JOIN

```
select * from student_data,address;
```

or

```
select * from student_data cross join address;
```

Data Output											Explain	Messages	Notifications
	id integer	fname text	lname text	email text	per integer	p_year integer	pin integer	id integer	state text				
1	1	Mayur	Khalkar	khalkarmay...	75	2014	422608	5	maharashtra				
2	1	Mayur	Khalkar	khalkarmay...	75	2014	423605	1	Gujrat				
3	1	Mayur	Khalkar	khalkarmay...	75	2014	423606	3	Panjab				
4	2	Sanket	Nimase	sanketnima...	76	2016	422608	5	maharashtra				
5	2	Sanket	Nimase	sanketnima...	76	2016	423605	1	Gujrat				
6	2	Sanket	Nimase	sanketnima...	76	2016	423606	3	Panjab				
7	3	Ashish	Gaikwad	ashishgaik...	85	2014	422608	5	maharashtra				
8	3	Ashish	Gaikwad	ashishgaik...	85	2014	423605	1	Gujrat				
9	3	Ashish	Gaikwad	ashishgaik...	85	2014	423606	3	Panjab				
10	4	Amruta	Nangare	amrutanan...	65	2016	422608	5	maharashtra				
11	4	Amruta	Nangare	amrutanan...	65	2016	423605	1	Gujrat				
12	4	Amruta	Nangare	amrutanan...	65	2016	423606	3	Panjab				
13	5	Varsha	Sangale	sangalevar...	76	2018	422608	5	maharashtra				
14	5	Varsha	Sangale	sangalevar...	76	2018	423605	1	Gujrat				
15	5	Varsha	Sangale	sangalevar...	76	2018	423606	3	Panjab				
16	6	Shraddha	Jadhav	jadhavshra...	85	2013	422608	5	maharashtra				
17	6	Shraddha	Jadhav	jadhavshra...	85	2013	423605	1	Gujrat				
18	6	Shraddha	Jadhav	jadhavshra...	85	2013	423606	3	Panjab				

Name: Mayur Khalkar

Assignment No -7

Batch - B

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Batch - B

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