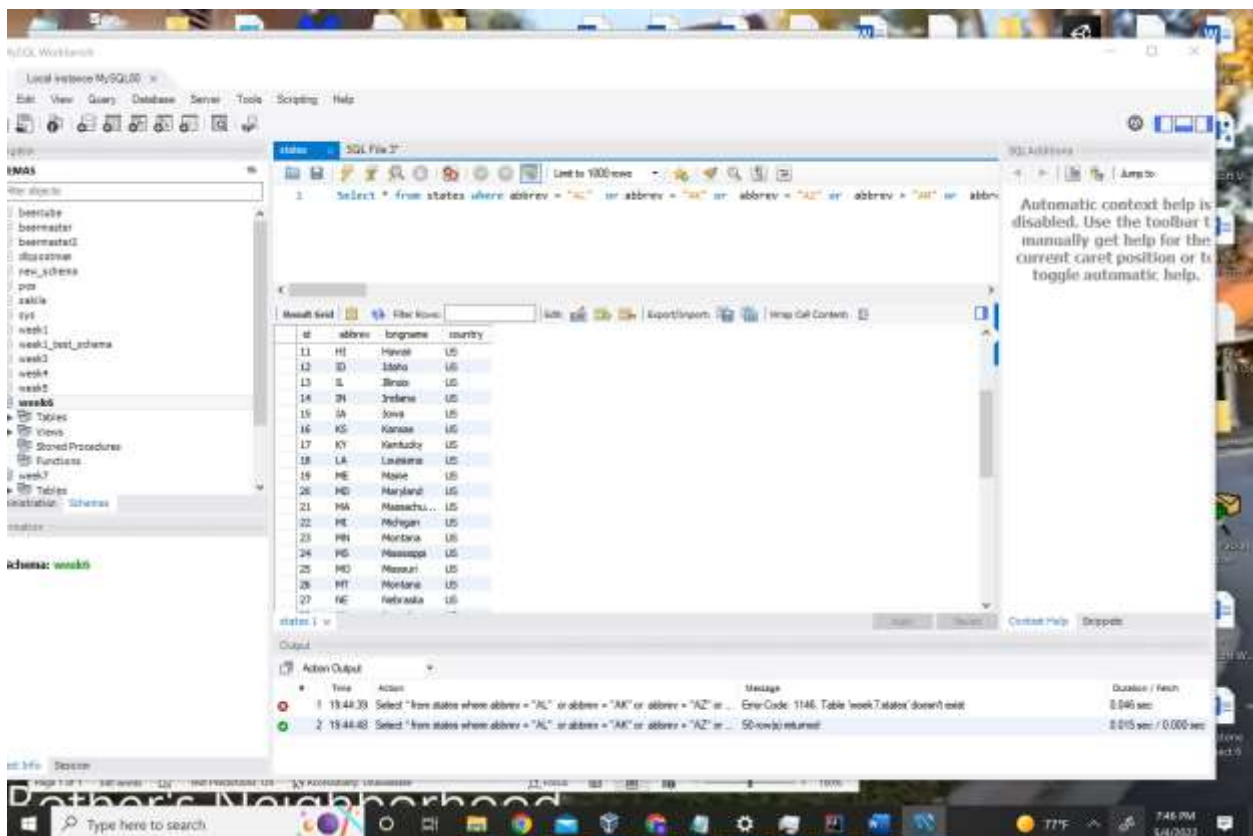


## Explaining Assignment

In each of these queries take notice of the execution time and the fetch time

1. 3 ways including ordered lists  
(States)

Select \* from states where abbrev = "AL" or abbrev = "AK" or abbrev = "AZ" or abbrev = "AR" or abbrev = "CA" or abbrev = "CO" or abbrev = "CT" or abbrev = "DE" or abbrev = "FL" or abbrev = "GA" or abbrev = "HI" or abbrev = "ID" or abbrev = "IL" or abbrev = "IN" or abbrev = "IA" or abbrev = "KS" or abbrev = "KY" or abbrev = "LA" or abbrev = "ME" or abbrev = "MD" or abbrev = "MA" or abbrev = "MI" or abbrev = "MN" or abbrev = "MS" or abbrev = "MO" or abbrev = "MT" or abbrev = "NE" or abbrev = "NV" or abbrev = "NH" or abbrev = "NJ" or abbrev = "NM" or abbrev = "NY" or abbrev = "NC" or abbrev = "ND" or abbrev = "OH" or abbrev = "OK" or abbrev = "OR" or abbrev = "PA" or abbrev = "RI" or abbrev = "SC" or abbrev = "SD" or abbrev = "TN" or abbrev = "TX" or abbrev = "UT" or abbrev = "VT" or abbrev = "VA" or abbrev = "WA" or abbrev = "WV" or abbrev = "WI" or abbrev = "WY"



Time: 0.015

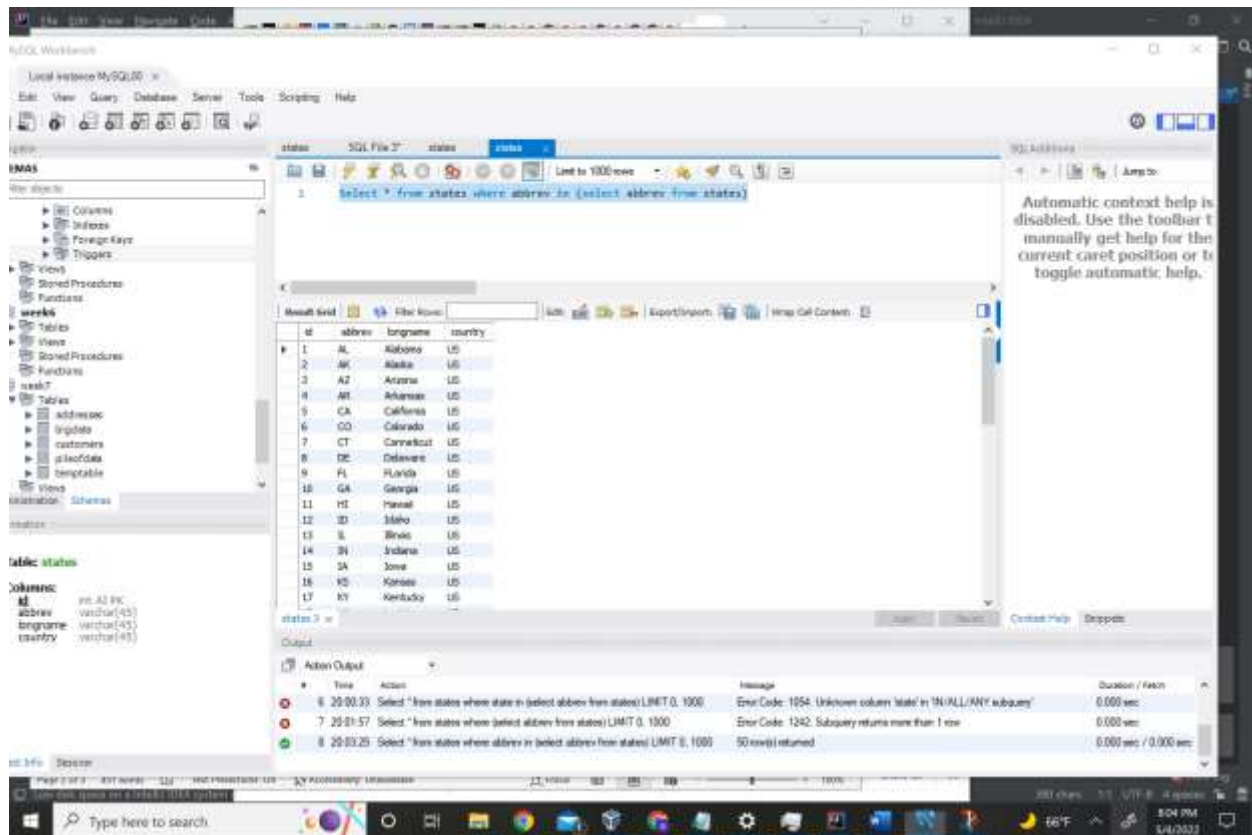
Select \* from states where abbrev in ("AL", "AK", "AZ", "AR", "CA", "CO", "CT", "DE", "FL", "GA", "HI", "ID", "IL", "IN", "IA", "KS", "KY", "LA", "ME", "MD", "MA", "MI", "MN", "MS", "MO", "MT", "NE", "NV", "NH", "NJ", "NM", "NY", "NC", "ND", "OH", "OK", "OR", "PA", "RI", "SC", "SD", "TN", "TX", "UT", "VT", "VA", "WA", "WV", "WI", "WY")

Time 0.000 sec

The screenshot shows the MySQL Workbench interface. The SQL Editor contains the query: `Select * from states where abbrev in ("AL", "AK", "AZ", "AR", "CA", "CO", "CT", "DC", "FL", "GA", "HI", "IL", "IN", "IA", "KS", "KY", "LA", "MA", "MD", "ME", "MI", "MN", "MO", "MS", "MT", "NE", "NH", "NJ", "NM", "NY", "NC", "ND", "OH", "OK", "OR", "PA", "RI", "SC", "SD", "TN", "TX", "UT", "VA", "VT", "WA", "WI", "WY", "ZZ")`. The Results tab shows a table with columns: id, abbrev, longname, country. The table contains 11 rows of data for US states. The Output tab shows the execution log with the following entries:

#	Time	Action	Message	Duration / Refresh
3	19:47:32	SELECT * FROM week.5 states LIMIT 0, 1000	50 rows(s) returned	0.047 sec / 0.000 sec
4	19:47:44	SELECT * FROM week.4 states LIMIT 0, 1000	50 rows(s) returned	0.081 sec / 0.000 sec
5	19:52:11	Select * from states where abbrev in ("AL", "AK", "AZ", "AR", "CA", "CO", "CT", "DC", "FL", "GA", "HI", "IL", "IN", "IA", "KS", "KY", "LA", "MA", "MD", "ME", "MI", "MN", "MO", "MS", "MT", "NE", "NH", "NJ", "NM", "NY", "NC", "ND", "OH", "OK", "OR", "PA", "RI", "SC", "SD", "TN", "TX", "UT", "VA", "VT", "WA", "WI", "WY", "ZZ")	50 rows(s) returned	0.089 sec / 0.000 sec

Select \* from states where abbrev in (select abbrev from states)



Time 0.00

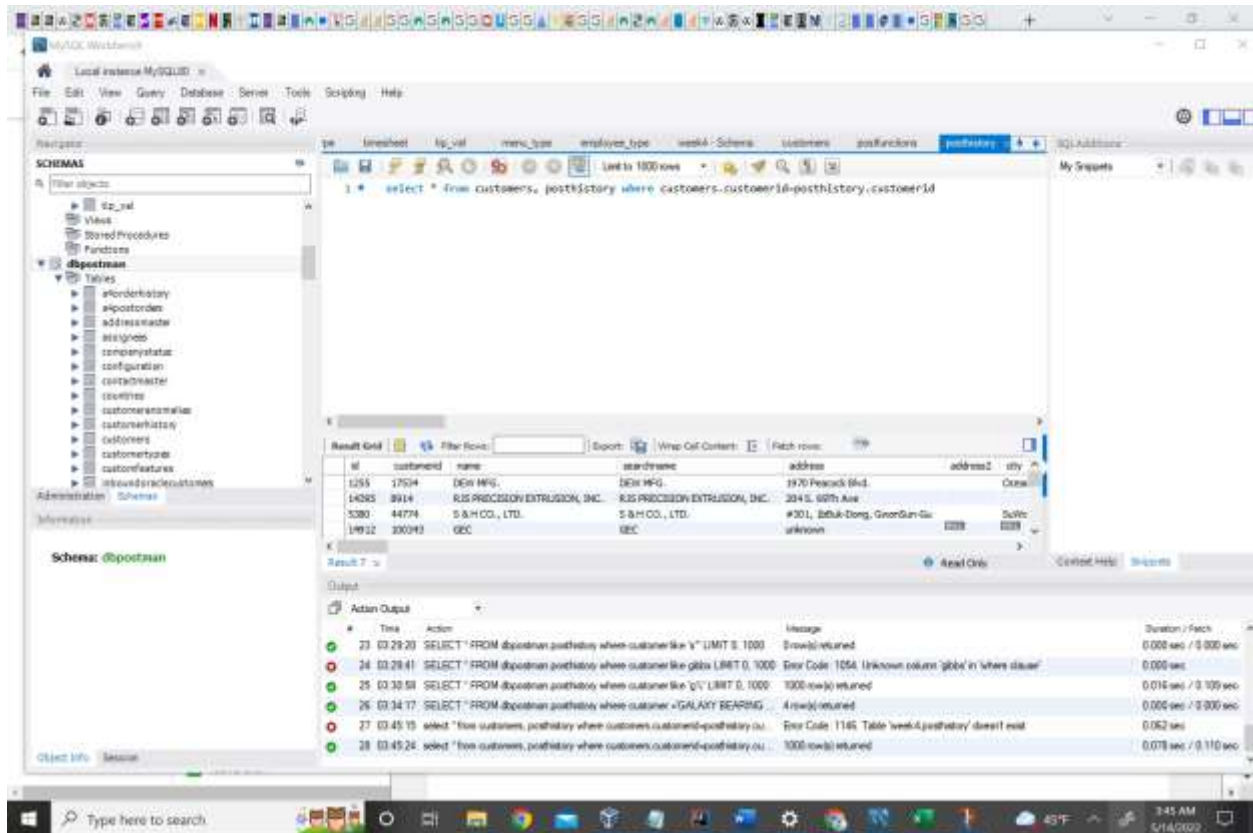
which is cheapest?

The bottom two

2 twoways to join

implicit (select \* from customers, posthistory where

c.customerid=ph.customerid



```
select * from customers inner join posthistory on c.customerid=ph.customerid'
```

MySQL Workbench

Local instance MySQL80 -

File Edit View Query Database Server Tools Scripting Help

Navigator

Filter objects

Schemas

dbpostman

Tables

alcoholhistory

alpostorden

addressmaster

assigned

companystatus

configuration

contactmaster

country

customeranalysis

customerhistory

customers

customerstatus

customerfeatures

customerpradecustomer

Administration Schema

Information

Schema: dbpostman

SQL Editor

1 select \* from customers inner join posthistory on customers.customerid = posthistory.customerid

Result Grid

id	customerid	name	searchname	address	address2	city
204	15407	ANZON	ANZON	17911 Clark Street	Arco	
14021	1311	HANDEL CORPORATION	HANDEL CORPORATION	16608 W. Ryerson Rd.	Har	
12570	15328	RAM	RAM	21728 Marle	Chas	
14772	30032	CONSOLIDATED TUMPAH	CONSOLIDATED TUMPAH	unknown		

Output

Action Output

#	Time	Action	Message	Duration / Fetch
25	03:30:58	SELECT * FROM dbpostman.posthistory where customerid like '15407' LIMIT 0, 1000	1000 row(s) returned	0.015 sec / 0.109 sec
26	03:34:17	SELECT * FROM dbpostman.posthistory where customerid = 'GALAXY BEARING'	4 row(s) returned	0.000 sec / 0.000 sec
27	03:43:15	select * from customers, posthistory where customers.customerid = posthistory.customerid	Error Code: 1146 Table 'week4.posthistory' doesn't exist	0.062 sec
28	03:45:24	select * from customers, posthistory where customers.customerid = posthistory.customerid	1000 row(s) returned	0.078 sec / 0.110 sec
29	03:47:36	select * from customers, posthistory where customers.customerid = posthistory.customerid	Error Code: 1052 Column 'customerid' in where clause is ambiguous	0.000 sec
30	03:51:17	select * from customers inner join posthistory on customers.customerid = posthistory.customerid	1000 row(s) returned	0.000 sec / 0.141 sec

Type here to search

3:11 AM 5/14/2022

MySQL Workbench

Local instance MySQL80 -

File Edit View Query Database Server Tools Scripting Help

Navigator

Filter objects

Schemas

dbpostman

Tables

alcoholhistory

alpostorden

addressmaster

assigned

companystatus

configuration

contactmaster

country

customeranalysis

customerhistory

customers

customerstatus

customerfeatures

customerpradecustomer

Administration Schema

Information

Schema: dbpostman

SQL Editor

1 select \* from customers inner join posthistory on customers.customerid = posthistory.customerid

Result Grid

id	customerid	name	searchname	address	address2	city
204	15407	ANZON	ANZON	17911 Clark Street	Arco	
14021	1311	HANDEL CORPORATION	HANDEL CORPORATION	16608 W. Ryerson Rd.	Har	
12570	15328	RAM	RAM	21728 Marle	Chas	
14772	30032	CONSOLIDATED TUMPAH	CONSOLIDATED TUMPAH	unknown		

Output

Action Output

#	Time	Action	Message	Duration / Fetch
25	03:30:58	SELECT * FROM dbpostman.posthistory where customerid like '15407' LIMIT 0, 1000	1000 row(s) returned	0.015 sec / 0.109 sec
26	03:34:17	SELECT * FROM dbpostman.posthistory where customerid = 'GALAXY BEARING'	4 row(s) returned	0.000 sec / 0.000 sec
27	03:43:15	select * from customers, posthistory where customers.customerid = posthistory.customerid	Error Code: 1146 Table 'week4.posthistory' doesn't exist	0.062 sec
28	03:45:24	select * from customers, posthistory where customers.customerid = posthistory.customerid	1000 row(s) returned	0.078 sec / 0.110 sec
29	03:47:36	select * from customers, posthistory where customers.customerid = posthistory.customerid	Error Code: 1052 Column 'customerid' in where clause is ambiguous	0.000 sec
30	03:51:17	select * from customers inner join posthistory on customers.customerid = posthistory.customerid	1000 row(s) returned	0.000 sec / 0.141 sec

Type here to search

3:11 AM 5/14/2022



### 3. search for strings

```
select * from posthistory where custiner like '...
```

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL statement:

```
1 * SELECT * FROM dipostan.posthistory where customer like '...';
```

The query has been executed, and the results are displayed in a table with the following columns: `id`, `requestor`, `postfunction`, `poststate`, `en`, `completeDate`, `comment`, `customer`, and `executeDate`. The results table contains 4 rows of data.

id	requestor	postfunction	poststate	en	completeDate	comment	customer	executeDate
1	Unknown	4	0000	0000	1997-01-31 00:00:00	0000	0000	1997-01-31 00:00:00
2	Unknown	1	0000	0000	1996-05-30 00:00:00	0000	SAJAJIT BAWANG CO	1996-05-30 00:00:00
3	Unknown	1	0000	0000	1991-04-20 00:00:00	0000	SHACT ENGINEERING INC	1991-04-20 00:00:00
4	Unknown	4	0000	0000	1994-11-30 00:00:00	0000	SHAZZANO HAZZANO	1994-11-30 00:00:00

The 'customer' column contains the following values: 0000, SAJAJIT BAWANG CO, SHACT ENGINEERING INC, and SHAZANO HAZZANO.

The 'executeDate' column contains the following values: 1997-01-31 00:00:00, 1996-05-30 00:00:00, 1991-04-20 00:00:00, and 1994-11-30 00:00:00.

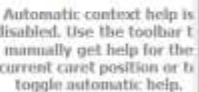
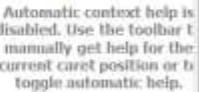
```
select * from posthistory where customer='...'
```

The screenshot shows the MySQL Workbench interface. The top toolbar includes options like File, Edit, View, Query, Database, Server, Tools, Scripting, and Help. The left sidebar displays the 'SCHEMAS' tree with a search filter 'Filter objects'. The main window shows a query: `SELECT * FROM shipman.posthistory where customer = 'GALAXY BEARING CO' LIMIT 1000 rows`. Below the query, the 'Result Grid' displays a table with columns: complete\_date, comment, customer, estimate, invoice, items, request, response, invoice\_date, and job. The table contains four rows of data for 'GALAXY BEARING CO'.

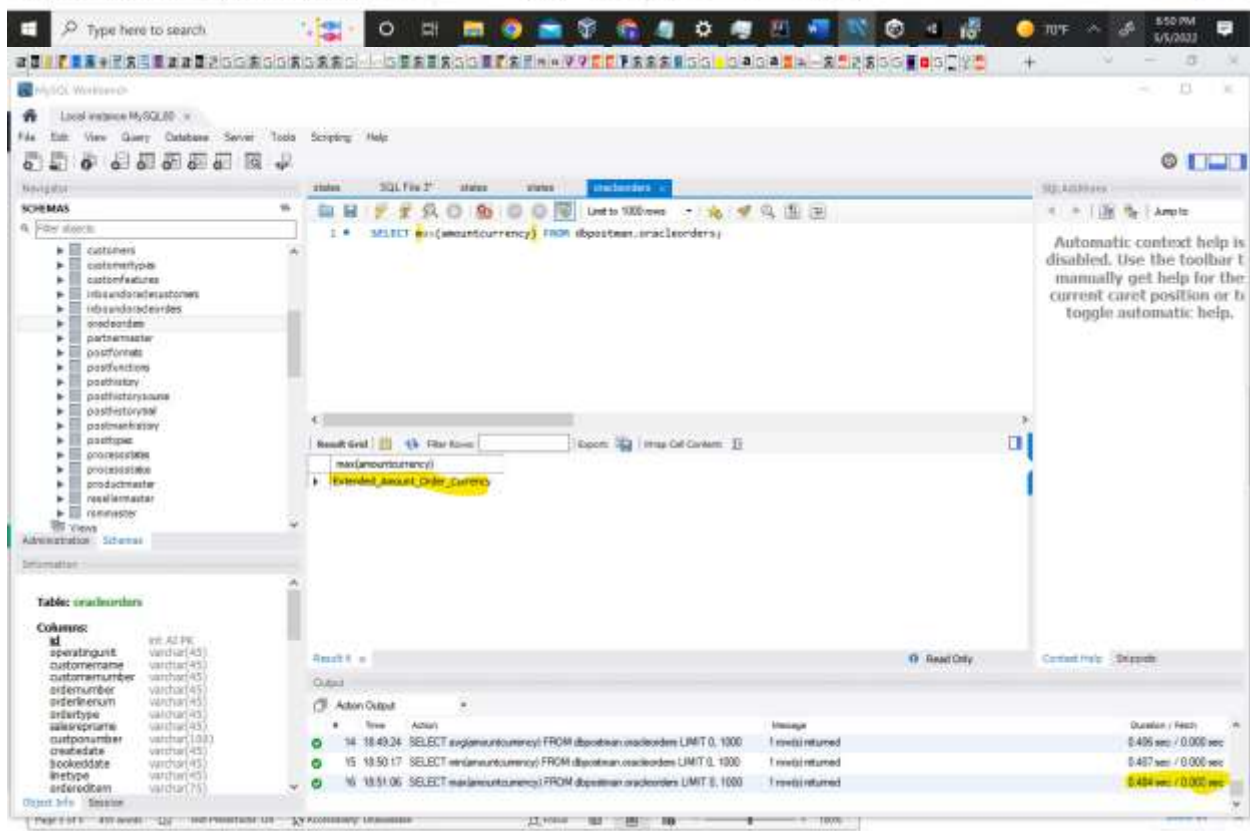
Below the Result Grid, the 'Table: posthistory' structure is shown with columns: id, assignee, postpriority, poststate, posttype, postmachine, postcontrol, postreason, customerid, requester, postfunction, and poststate. The 'Output' section shows the execution log with messages and durations.

Time	Action	Message	Duration / Fetch
21 03:28:43	SELECT * FROM shipman.posthistory where customer like 'GALAXY BEARING CO' LIMIT 0, 1	0 rows returned	0.000 sec / 0.000 sec
22 03:28:59	SELECT * FROM shipman.posthistory where customer like 'G' LIMIT 0, 1000	0 rows returned	0.015 sec / 0.000 sec
23 03:29:20	SELECT * FROM shipman.posthistory where customer like 'G' LIMIT 0, 1000	0 rows returned	0.000 sec / 0.000 sec
24 03:29:41	SELECT * FROM shipman.posthistory where customer like 'GALAXY BEARING CO' LIMIT 0, 1000	Error Code: 1054, Unknown column 'GALAXY BEARING CO' in 'where clause'	0.000 sec
25 03:30:58	SELECT * FROM shipman.posthistory where customer like 'G' LIMIT 0, 1000	1000 rows returned	0.015 sec / 0.100 sec
26 03:34:17	SELECT * FROM shipman.posthistory where customer = 'GALAXY BEARING CO' LIMIT 0, 1000	4 rows returned	0.000 sec / 0.000 sec

4. What about aggregation  
 try sum ave min max on amount from oracleorders







Not Quite sure where to find them