```
Last login: Fri Jun 7 18:25:16 on ttys000
sahilkumar@SAHILs-MacBook-Air ~ % brew services start mysql
Service `mysql` already started, use `brew services restart mysql` to restart.
sahilkumar@SAHILs-MacBook-Air ~ %
sahilkumar@SAHILs-MacBook-Air ~ % mysql -u root
Welcome to the MySQL monitor. Commands end with; or \g.
Your MySQL connection id is 21
Server version: 8.3.0 Homebrew
Copyright (c) 2000, 2024, Oracle and/or its affiliates.
Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
mysql> show databases;
| Database
 information_schema
 mysql
 performance_schema
 school
sys
5 rows in set (0.03 sec)
mysql> use school;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A
Database changed
mvsal>
mysql> show tables;
 Tables_in_school |
 courses
 students
 votingList
3 rows in set (0.00 sec)
mysql> select * from students;
 studentid | firstname | lastname | dateOfBirth | email
          2 | Johny
                        l Dep
                                    2002-05-21 | johndep@gmail.com
          3 | Chris
                        | Evan
                                   | 2001-03-03 | chris123@gmail.com
2 rows in set (0.01 sec)
mysql> select * from students where studentid = 3;
 studentid | firstname | lastname | dateOfBirth | email
                                   | 2001-03-03 | chris123@gmail.com |
          3 | Chris
                       | Evan
1 row in set (0.00 sec)
mysql> select studentid, firstname, lastname from students where studentid = 3;
| studentid | firstname | lastname |
          3 | Chris
                        | Evan
```

mysql>

1 row in set (0.00 sec)

mysql> select \* from students;

	studentid	firstname	lastname	dateOfBirth	email
		Johny Chris	Dep   Evan	2002-05-21   2001-03-03	johndep@gmail.com     chris123@gmail.com

2 rows in set (0.00 sec)

mysql> insert into students (studentid,firstname,lastname,dateofbirth,email) values (1,'John','Doe','200 0-02-20','johndoe@gmail.com');

Query OK, 1 row affected (0.00 sec)

mysql> insert into students (studentid,firstname,lastname,dateofbirth,email) values (4,'Allen','Cooper',
'2000-02-20','allen@gmail.com');

Query OK, 1 row affected (0.00 sec)

mysql> insert into students (studentid,firstname,lastname,dateofbirth,email) values (5,'donny','yen','20 01

Query OK, 1 row affected (0.00 sec)

mysql> select \* from students;

studentid	+   firstname +	   lastname	+   dateOfBirth +	+   email 
1	John	Doe	2000-02-20	johndoe@gmail.com
2	Johny	Dep	2002-05-21	johndep@gmail.com
3	Chris	Evan	2001-03-03	chris123@gmail.com
4	Allen	Cooper	2000-02-20	allen@gmail.com
5	donny	yen	2001-02-20	donny@gmail.com

5 rows in set (0.00 sec)

mysql> select \* from students;

		L			
	studentid	firstname	lastname	dateOfBirth	email
	1 2 3 4 5	John   Johny   Chris   Allen   donny	Doe Dep Evan Cooper	2000-02-20 2002-05-21 2001-03-03 2000-02-20 2001-02-20	johndoe@gmail.com   johndep@gmail.com   chris123@gmail.com   allen@gmail.com   donny@gmail.com
-		<del></del>	+	+	<del> </del>

5 rows in set (0.00 sec)

mysql> select \* from students;

4		<b></b>	<b></b>	+	<b></b>	4
j	studentid	firstname	lastname	dateOfBirth	email	
	1 2 3 4 5	Allen	Doe Dep Evan Cooper	2000-02-20   2002-05-21   2001-03-03   2000-02-20   2001-02-20	johndoe@gmail.com   johndep@gmail.com   chris123@gmail.com   allen@gmail.com   donny@gmail.com	
-		+	+	+	<del> </del>	t

5 rows in set (0.00 sec)

mysql> select \* from students where id=1;

ERROR 1054 (42S22): Unknown column 'id' in 'where clause'

mysql> select \* from students where studentid=1;

	studentid	firstname	lastname	dateOfBirth	   email
	1	John	Doe	2000-02-20	johndoe@gmail.com

1 row in set (0.00 sec)

mysql> select  $\ast$  from students where studentid between 1 and 3;

				T		σ,
	studentid	firstname	lastname	dateOfBirth	email	
+-	+		<b>+</b>	+	<b> </b>	H

```
1 | John
                       Doe
                                  | 2000-02-20 | johndoe@gmail.com
         2 | Johny
                       Dep
                                   2002-05-21
                                               | johndep@gmail.com
                                  | 2001-03-03 | chris123@gmail.com |
         3 | Chris
                       | Evan
3 rows in set (0.00 sec)
mysql> select * from students where studentid in (1,2,5);
           -+----
| studentid | firstname | lastname | dateOfBirth | email
         1 | John
                                  | 2000-02-20 | johndoe@gmail.com
                       Doe
         2 | Johny
                       | Dep
                                  | 2002-05-21 | johndep@gmail.com
         5 | donny
                                 | 2001-02-20 | donny@gmail.com
                       | yen
3 rows in set (0.00 sec)
mysql> select * from students;
| studentid | firstname | lastname | dateOfBirth | email
         1 | John
                       Doe
                                  | 2000-02-20 | johndoe@gmail.com
         2 | Johny
                                 | 2002-05-21 | johndep@gmail.com
                       Dep
         3 | Chris
                       | Evan
                                 | 2001-03-03 | chris123@gmail.com |
                                               | allen@gmail.com
         4 | Allen
                       Cooper
                                 2000-02-20
         5 | donny
                       yen
                                  | 2001-02-20 | donny@gmail.com
5 rows in set (0.00 sec)
mysql> select * from students where id=1 or id =4;
ERROR 1054 (42S22): Unknown column 'id' in 'where clause'
mysql> select * from students where studentid=1 or studentid =4;
 studentid | firstname | lastname | dateOfBirth | email
         1 | John
                                  | 2000-02-20 | johndoe@gmail.com
                       l Doe
         4 | Allen
                       Cooper
                                  | 2000-02-20 | allen@gmail.com
2 rows in set (0.00 sec)
mysql> select * from students where firstname = "John" and lastname = "doe";
 studentid | firstname | lastname | dateOfBirth | email
         1 | John | Doe | 2000-02-20 | johndoe@gmail.com |
1 row in set (0.00 sec)
mysql> select * from students where firstname = "John" or lastname = "doe";
| studentid | firstname | lastname | dateOfBirth | email
         1 | John
                       Doe
                                  | 2000-02-20 | johndoe@gmail.com |
1 row in set (0.00 sec)
mysql> select * from students
 studentid | firstname | lastname | dateOfBirth | email
         1 | John
                                   2000-02-20 | johndoe@gmail.com
                       l Doe
                                   2002-05-21 |
         2 | Johnv
                       Dep
                                                 johndep@gmail.com
         3 | Chris
                                   2001-03-03
                                               | chris123@gmail.com
                        Evan
         4 | Allen
                       Cooper
                                   2000-02-20
                                                 allen@gmail.com
         5 | donny
                                  | 2001-02-20 | donny@gmail.com
                       | yen
5 rows in set (0.00 sec)
mysql> show tables;
```

| Tables\_in\_school |

```
courses
 students
| votingList
3 rows in set (0.00 sec)
mysql> select * from courses;
Empty set (0.00 sec)
mysql> desc courses;
                            | Null | Key | Default | Extra |
                                   | PRI | NULL
| courseid | int
                            l NO
| coursename | varchar(100) | NO
                                         NULL
| credits
           | int
                            | YES
                                          NULL
3 rows in set (0.00 sec)
mysql> insert into courses values (101, "DBMS", 3), (102, "DSA", 4), (103, ";
    "> Java" , 3);
Query OK, 3 rows affected (0.00 sec)
Records: 3 Duplicates: 0 Warnings: 0
mysql> select * from courses;
| courseid | coursename | credits |
      101 | DBMS
                                3 I
       102 | DSA
       103 | ;
                3 |
Java
3 rows in set (0.00 sec)
mysql> delete from courses;
Query OK, 3 rows affected (0.00 sec)
mysql> select * from courses;
Empty set (0.00 sec)
mysql> insert into courses values (101, "DBMS", 3), (102, "DSA", 4), (103, "JAVA", 3);
Query OK, 3 rows affected (0.01 sec)
Records: 3 Duplicates: 0 Warnings: 0
mysql> select * from courses;
| courseid | coursename | credits |
      101 | DBMS
                                3
      102 | DSA
                                4 |
      103 | JAVA
3 rows in set (0.00 sec)
mysql> select * from students
 studentid | firstname | lastname | dateOfBirth | email
          1 | John
                        Doe
                                   2000-02-20
                                                    johndoe@gmail.com
          2 | Johny
                                     2002-05-21
                                                    johndep@gmail.com
                        Dep
          3 | Chris
                                   | 2001-03-03
                                                  | chris123@gmail.com |
                        l Evan
          4 | Allen
                        | Cooper
                                   | 2000-02-20
                                                | allen@gmail.com
          5 | donny
                        | yen
                                    | 2001-02-20 | donny@gmail.com
```

5 rows in set (0.00 sec)

mysql> select \* from students where dateofBirth>"2000-01-01";

studentid	firstname	   lastname	dateOfBirth 	email
	Allen	Doe Dep Evan Cooper	2000-02-20   2002-05-21   2001-03-03   2000-02-20   2001-02-20	johndoe@gmail.com   johndep@gmail.com   chris123@gmail.com   allen@gmail.com   donny@gmail.com

5 rows in set (0.01 sec)

mysql> select \* from students where dateofBirth>"2001-01-01";

studentid	   firstname	+   lastname	dateOfBirth	email
3	Johny	Dep	2002-05-21	johndep@gmail.com
	Chris	Evan	2001-03-03	chris123@gmail.com
	donny	yen	2001-02-20	donny@gmail.com

3 rows in set (0.00 sec)

mysql> select \* from students where id =2 or id =10; ERROR 1054 (42S22): Unknown column 'id' in 'where clause' mysql> select \* from students where studentid =2 or studentid =10;

5	studentid	firstname	lastname	dateOfBirth	email
İ	2	Johny	Dep	2002–05–21	johndep@gmail.com

1 row in set (0.00 sec)

mysql> select \* from students where firstname="Johny" and lastname="yen"; Empty set (0.00 sec)

mysql> select \* from students where not studentid = 5;

		L	L		L
studentid	firstname	lastname	dateOfBirth	email	
2	John   Johny   Chris   Allen	Doe Dep Evan Cooper	2000-02-20   2002-05-21   2001-03-03   2000-02-20	johndoe@gmail.com johndep@gmail.com chris123@gmail.com allen@gmail.com	- 

4 rows in set (0.00 sec)

mysql> select \* from students where firstname like "j%";

	studentid	firstname	lastname	dateOfBirth	email	
		John Johny	Doe Dep	•	johndoe@gmail.com   johndep@gmail.com	•

2 rows in set (0.00 sec)

mysql> select \* from students where firstname like "%s";

studentid	firstname	lastname	dateOfBirth	email
3	Chris	Evan	2001–03–03 	chris123@gmail.com

1 row in set (0.00 sec)

mysql> select \* from students where firstname like "%n%";

_			L	<del></del>	L	_
	studentid	firstname	lastname	dateOfBirth	email	
		John Johny	Doe   Dep	2000-02-20   2002-05-21	johndoe@gmail.com     johndep@gmail.com	   
	4	Allen	Cooper	2000-02-20	allen@gmail.com	1
	5	donny	yen	2001-02-20	donny@gmail.com	ĺ

```
4 rows in set (0.00 sec)
mysql> select * from students where firstname like "__h%";
| studentid | firstname | lastname | dateOfBirth | email
         1 | John
                       Doe
                                  | 2000-02-20 | johndoe@gmail.com
         2 | Johny
                                  | 2002-05-21 | johndep@gmail.com
                       Dep
2 rows in set (0.00 sec)
mysql> select * from students
| studentid | firstname | lastname | dateOfBirth | email
         1 | John
                                  | 2000-02-20 | johndoe@gmail.com
                       Doe
         2 | Johny
                       | Dep
                                  | 2002-05-21 | johndep@gmail.com
         3 | Chris
                       | Evan
                                  | 2001-03-03 | chris123@gmail.com |
         4 | Allen
                       Cooper
                                 | 2000-02-20 | allen@gmail.com
         5 | donny
                                   | 2001-02-20 | donny@gmail.com
                        yen
5 rows in set (0.00 sec)
mysql> select count(*) from students;
| count(*) |
       5 |
1 row in set (0.00 sec)
mysql> select count(*) as Total_Students from students;
 Total_Students |
              5 |
1 row in set (0.00 sec)
mysql> select * from courses;
| courseid | coursename | credits |
      101 | DBMS
                               3 I
      102 | DSA
                               4
      103 | JAVA
                               3 |
3 rows in set (0.00 sec)
mysql> select sum(credits) from courses;
| sum(credits) |
           10 |
1 row in set (0.00 sec)
mysql> select sum(credits) as "Total Credits" from courses;
 Total Credits |
           10 |
1 row in set (0.01 sec)
mysql> select avg(credits) as "average credits" from courses;
| average credits |
```

```
1 row in set (0.00 sec)
mysql> select min(credits) as "min credits" from courses;
| min credits |
1 row in set (0.01 sec)
mysql> select max(credits) as "min credits" from courses;
| min credits |
    4 |
1 row in set (0.00 sec)
mysql> select round( avg(credits)) from courses;
| round( avg(credits)) |
1 row in set (0.01 sec)
mysql> select round( avg(credits),2) from courses;
| round( avg(credits),2) |
                  3.33 |
1 row in set (0.00 sec)
mysql> select round( 1.66,2) from courses;
| round( 1.66,2) |
           1.66
           1.66
           1.66 |
3 rows in set (0.00 sec)
mysql> select round( 1.66,2);
| round( 1.66,2) |
          1.66
1 row in set (0.00 sec)
mysql> select * from course
ERROR 1146 (42S02): Table 'school.course' doesn't exist
mysql> select * from courses;
| courseid | coursename | credits |
      101 | DBMS
                               3 I
      102 | DSA
                                4 |
      103 | JAVA
                               3 |
3 rows in set (0.00 sec)
mysql> select * from students;
| studentid | firstname | lastname | dateOfBirth | email
```

3.3333 |

```
John
                                      2000-02-20
                                                    johndoe@gmail.com
                          Doe
                                                    johndep@gmail.com
          2
              Johny
                          Dep
                                      2002-05-21
                                                    chris123@gmail.com
          3
                                     2001-03-03
            | Chris
                          Evan
            | Allen
                                     2000-02-20
                                                    allen@gmail.com
                          Cooper
          5 | donny
                                    2001-02-20
                                                  | donny@gmail.com
                          yen
5 rows in set (0.00 sec)
mysql>
mysql> create database company;
Query OK, 1 row affected (0.01 sec)
mysql> use company;
Database changed
```

mysql> create table employees (id int primary key auto\_increment,emp\_name varchar(100) not null,dept var char(100) not null , salary int);

Query OK, 0 rows affected (0.02 sec)

mysql> insert into employees (emp\_name,dept,salary) values ("Lokesh","IT",25000),("Sahil","IT",95000),("
Amit","Admin",100000),("Ram","Sales",100000);

Query OK, 4 rows affected (0.00 sec)

Records: 4 Duplicates: 0 Warnings: 0

mysql> select \* from company;

ERROR 1146 (42S02): Table 'company.company' doesn't exist

mysql> select \* from employees;

id	emp_name	•	   salary   
1	Lokesh   Sahil	IT   IT   Admin   Sales	25000     25000     95000     100000

4 rows in set (0.00 sec)

mysql> insert into employees (emp\_name,dept,salary) values ("Lokesh","IT",25000),("Ashish","IT",195000),
("Amit kr","Security",9000),("Himanshu","Sales",10000);

Query OK, 4 rows affected (0.00 sec) Records: 4 Duplicates: 0 Warnings: 0

mysql> select \* from employees;

id	emp_name	dept	salary
1   2   3   4   5   6   7   8	Lokesh Sahil Amit Ram Lokesh Ashish Amit kr Himanshu	IT IT Admin Sales IT IT Security Sales	25000     95000     100000     100000     25000     195000     9000

8 rows in set (0.00 sec)

mysql> select dept , count(dept) from employees;

ERROR 1140 (42000): In aggregated query without GROUP BY, expression #1 of SELECT list contains nonaggre gated column 'company.employees.dept'; this is incompatible with sql\_mode=only\_full\_group\_by mysql>

mysql> select dept , count(dept) from employees group by dept;

dept	count(dept)
IT   Admin   Sales   Security	4   1   2   1

4 rows in set (0.00 sec)

mysql> select dept , count(dept) as "Total Employees in each dept" from employees group by dept; dept | Total Employees in each dept | | IT | Admin 1 | 2 | | Sales | Security | 1 | 4 rows in set (0.00 sec) mysql> select dept , count(dept) as "Total Employees in each dept" from employees group by dept having | Total Employees in each dept | | Admin | Security | 1 | 2 rows in set (0.00 sec) mysql> select \* from employees; | id | emp\_name | dept | salary | 1 | Lokesh | IT | 25000 | 95000 | IT 2 | Sahil | Admin | 100000 3 | Amit 4 | Ram | Sales | 100000 25000 5 | Lokesh | IT 6 | Ashish 6 | Ashish | IT | 7 | Amit kr | Security | 195000 9000 | 10000 | 8 | Himanshu | Sales 8 rows in set (0.00 sec) mysql> select min(salary) from employees; min(salary) | 9000 | 1 row in set (0.00 sec) mysql> select max(salary) from employees; | max(salary) | 195000 | 1 row in set (0.00 sec) mysql> select avg(salary) from employees; avg(salary) | 69875.0000 | 1 row in set (0.00 sec) mysql> select \* from employees; id | emp\_name | dept | salary | 1 | Lokesh | IT | 25000 | 2 | Sahil | IT 95000 3 | Amit | Admin | 100000 | | Sales 4 | Ram | 100000

4 | Kaiii 5 | Lokesh | IT

6 | Ashish

| IT

7 | Amit kr | Security | 9000 |

25000

195000

```
| 8 | Himanshu | Sales
```

8 rows in set (0.00 sec)

mysql> select \* from employees oder by salary;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQ L server version for the right syntax to use near 'by salary' at line 1

mysql> select \* from employees order by salary;

+	<b></b>	+	+
id	emp_name	dept	salary
+   7   8   1   5   2   3   4		Security   Sales   IT   IT   IT   Admin   Sales	9000     10000     25000     25000     95000     100000
6	Ashish	IT	195000

8 rows in set (0.00 sec)

mysql> select \* from employees order by salary asc;

i	.d	emp_name	dept	salary
+           	7   8   1   5   2   3   4	Amit kr Himanshu Lokesh Lokesh Sahil Amit Ram	Security   Sales   IT   IT   IT   Admin   Sales	9000     10000     25000     25000     95000     100000
	6	Ashish	IT	195000

8 rows in set (0.00 sec)

mysql> select \* from employees order by salary desc;

ㅗ.		ъ.			
	id		emp_name	dept	salary
Ī	6	l	Ashish	IT	195000
Ĺ	3	Ì	Amit	Admin	100000
Ĺ	4	Ì	Ram	Sales	100000
Ì	2	Ì	Sahil	IT	95000
Ì	1	Ì	Lokesh	IT	25000
ĺ	5	Ì	Lokesh	IT	25000
ĺ	8	Ĺ	Himanshu	Sales	10000
ĺ	7	Ĺ	Amit kr	Securit	y j 9000 j

8 rows in set (0.00 sec)

mysql> select \* from employees;

id	emp_name	dept	salary
1	Lokesh	IT	25000
2	Sahil	IT	95000
3	Amit	Admin	100000
4	Ram	Sales	100000
5	Lokesh	IT	25000
6	Ashish	IT	195000
7	Amit kr	Security	9000
8	Himanshu	Sales	10000
rows	in set (0	.00 sec)	+

mysql> select \* from employees where id between 1 and 5;

++-		+	-+
id	emp_name	dept	salary
++-		+	-++

	1	Lokesh	IT	25000
Ì	2	Sahil	IT	95000
	3	Amit	Admin	100000
	4	Ram	Sales	100000
	5	Lokesh	IT	25000

5 rows in set (0.00 sec)

mysql> select \* from employees limit 3;

	emp_name		salary   
1   2	Lokesh   Sahil   Amit	IT   IT	25000     95000     100000

3 rows in set (0.00 sec)

mysql> select \* from employees limit 5;
+---+

id	emp_name	dept	salary
1   2   3   4   5	Amit   Ram	IT   IT   Admin   Sales   IT	25000     95000     100000     100000     25000

5 rows in set (0.00 sec)

mysql>