joe@db-2021:$ echo "We want to enable mysql so that remote connections can be made to the database"
We want to enable mysql so that remote connections can be made to the database
joe@db-2021:
```
$ netstat -natp
(No info could be read for "-p": geteuid()=1001 but you should be root.)
Active Internet connections (servers and established)
  Proto Recv-Q Send-Q Local Address      Foreign Address         State   PID/Program name
  tcp   0      0    127.0.0.53:53      0.0.0.0:*          LISTEN    
  tcp   0      0   0.0.0.0:22          0.0.0.0:*          LISTEN    
  tcp   0      0   127.0.0.1:33060     0.0.0.0:*          LISTEN    
  tcp   0      0   127.0.0.1:33060     0.0.0.0:*          LISTEN    
  tcp   0      28  144.38.199.55:22   144.38.198.18:51840 ESTABLISHED  
  tcp6  0      0    ::22                :::*                LISTEN    
```

```
$ echo "only listening on localhost address"
```
joe@db-2021:~ $ sudo vi /etc/mysql/mysql.conf.d/mysqld.cnf
Here is entries for some specific programs
The following values assume you have at least 32M ram

[mysqld]
#
#   Basic Settings
#
user          = mysql
# pid-file     = /var/run/mysqld/mysqld.pid
# socket       = /var/run/mysqld/mysqld.sock
# port         = 3306
# datadir      = /var/lib/mysql

# If MySQL is running as a replication slave, this should be
var_tmpdir
# tmpdir       = /tmp
#
# Instead of skip-networking the default is now to listen only on
# localhost which is more compatible and is not less secure.
bind-address   = 127.0.0.1
mysqlx-bind-address = 127.0.0.1
#
# Fine Tuning
#
key_buffer_size = 16M

*/etc/mysql/mysql.conf.d/mysqld.cnf*  78L, 2220C  31,1  17%
# Here is entries for some specific programs
# The following values assume you have at least 32M ram

[mysqld]
#
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#
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# pid-file = /var/run/mysqld/mysqld.pid
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# tmpdir
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<tr>
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<td>tcp</td>
<td>0</td>
<td>0</td>
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<td>LISTEN</td>
<td>-</td>
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<td>::::*</td>
<td>LISTEN</td>
<td>-</td>
</tr>
</tbody>
</table>
root@www-thegummbear:~# echo "From the webserver I am going to test and see if we can connect to the database"
From the webserver I am going to test and see if we can connect to the database
root@www-thegummbear:~#
root@www-thegummibear:~# apt install -y mysql-client
Enter password:

```
root@www-thegummbear:# mysql -u harry -p -h db.thegummbear.com
```

```
ERROR 1130 (HY000): Host 'www.thegummbear.com' is not allowed to connect to this MySQL server
```

```
root@www-thegummbear:# echo "In the above command, -u is the user we want to connect as, -p will prompt us for password, -h is the host we want to connect to. In the above command, -u is the user we want to connect as, -p will prompt us for password, -h is the host we want to connect to"
```

```
root@www-thegummbear:# echo "Clearly there is still a problem"
```

Clearly there is still a problem
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 9
Server version: 8.0.26-0ubuntu0.20.04.3 (Ubuntu)

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>
mysql> use mysql;
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
mysql> select User,Host from user;

<table>
<thead>
<tr>
<th>User</th>
<th>Host</th>
</tr>
</thead>
<tbody>
<tr>
<td>debian-sys-maint</td>
<td>localhost</td>
</tr>
<tr>
<td>harry</td>
<td>localhost</td>
</tr>
<tr>
<td>mysql.infoschema</td>
<td>localhost</td>
</tr>
<tr>
<td>mysql.session</td>
<td>localhost</td>
</tr>
<tr>
<td>mysql.sys</td>
<td>localhost</td>
</tr>
<tr>
<td>root</td>
<td>localhost</td>
</tr>
</tbody>
</table>

6 rows in set (0.00 sec)

mysql> harry is only allowed to connect from the localhost
mysql> create user 'harry'@'www.thebumblebear.com' identified by 'Griffindor123?';  
Query OK, 0 rows affected (0.02 sec)

mysql> grant all privileges on hogwarts.* to 'harry'@'www.thebumblebear.com';  
Query OK, 0 rows affected (0.05 sec)

mysql> select User,Host from user;
+----------+-----------+
<table>
<thead>
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<tr>
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<td>localhost</td>
</tr>
<tr>
<td>root</td>
<td>localhost</td>
</tr>
<tr>
<td>harry</td>
<td><a href="http://www.thebumblebear.com">www.thebumblebear.com</a></td>
</tr>
</tbody>
</table>
+----------+-----------+

7 rows in set (0.00 sec)

mysql>
root@www-thegummibear:~# echo 'now test if harry can connect again. Once you login see if you can access the hogwarts database and/or any tables within it'
now test if harry can connect again. Once you login see if you can access the hogwarts database and/or any tables within it
root@www-thegummibear:~# mysql -u harry -p -h db.thegummibear.com