```
(base) Liyuans-MBP:~ liyuansun$ mysql -u root -p
```

```
mysql> SELECT * from mysql.user where User="root";
```

```
mysql> ALTER USER 'root'@'localhost' IDENTIFIED BY '<2426250509>';
Query OK, 0 rows affected (0.01 sec)
```

```
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
```

ALTER USER 'root'@'localhost' IDENTIFIED BY '';

update user set authentication_string=null where user='root';

Step 2: Connect to Database*

```
var mysql = require('mysql');

var connection = mysql.createConnection({
  host     : 'localhost',
  user     : 'root',     // your root username
  database : 'join_us'   // the name of your db
});
```

Step 3: Run Queries

Running a super simple SQL query like:

```
SELECT 1 + 1;
```

Using the MySQL Node Package:

```
connection.query('SELECT 1 + 1 AS solution', function (error,
   if (error) throw error;
   console.log('The solution is: ', results[0].solution);
});
```

Another sample query, this time selecting 3 things:

```
var q = 'SELECT CURTIME() as time, CURDATE() as date, NOW() as
connection.query(q, function (error, results, fields) {
  if (error) throw error;
  console.log(results[0].time);
  console.log(results[0].date);
  console.log(results[0].now);
});
```

The equivalent SQL query:

```
SELECT CURTIME() as time, CURDATE() as date, NOW() as now;
```

Inserting Data Using Node

Approach #1

```
var q = 'INSERT INTO users (email) VALUES ("rusty_the_dog@gmail.com")

connection.query(q, function (error, results, fields) {
  if (error) throw error;
  console.log(results);
});
```

An easier approach that allows for dynamic data

```
var person = {
    email: faker.internet.email(),
    created_at: faker.date.past()
};

var end_result = connection.query('INSERT INTO users SET ?', person,
  if (err) throw err;
  console.log(result);
});
```

To SELECT all users from database:

```
var q = 'SELECT * FROM users ';
connection.query(q, function (error, results, fields) {
  if (error) throw error;
  console.log(results);
});
```

To count the number of users in the database:

```
var q = 'SELECT COUNT(*) AS total FROM users ';
connection.query(q, function (error, results, fields) {
  if (error) throw error;
  console.log(results[0].total);
});
```

The Code To INSERT 500 Random Users

```
var mysql = require('mysql');
var faker = require('faker');


var connection = mysql.createConnection({
  host     : 'localhost',
  user     : 'root',
  database : 'join_us'
});


var data = [];
for(var i = 0; i < 500; i++){
    data.push([
        faker.internet.email(),
        faker.date.past()
    ]);
}


var q = 'INSERT INTO users (email, created_at) VALUES ?';

connection.query(q, [data], function(err, result) {
  console.log(err);
  console.log(result);
});

connection.end();
```

Solutions To 500 Users Exercises

-- Challenge 1

```
SELECT
    DATE_FORMAT(MIN(created_at), "%M %D %Y") as earliest_date
FROM users;
```

-- Challenge 2

```
SELECT *
FROM   users
WHERE  created_at = (SELECT Min(created_at)
                     FROM   users);
```

-- Challenge 3

```
SELECT Monthname(created_at) AS month,
       Count(*)              AS count
FROM   users
GROUP  BY month
ORDER  BY count DESC;
```

-- Challenge 4

```
SELECT Count(*) AS yahoo_users
FROM   users
WHERE  email LIKE '%@yahoo.com';
```

-- Challenge 5

```
SELECT CASE
         WHEN email LIKE '%@gmail.com' THEN 'gmail'
         WHEN email LIKE '%@yahoo.com' THEN 'yahoo'
         WHEN email LIKE '%@hotmail.com' THEN 'hotmail'
         ELSE 'other'
       end      AS provider,
       Count(*) AS total_users
FROM   users
GROUP  BY provider
ORDER  BY total_users DESC;
```