**Magic Eight Ball**

You’ve learned a powerful tool in JavaScript: control flow! It’s so powerful, in fact, that it can be used to tell someone’s fortune.

In this project we will build the [Magic Eight Ball](https://en.wikipedia.org/wiki/Magic_8-Ball) using control flow in JavaScript.

The user will be able to input a question, then our program will output a random fortune.

If you get stuck during this project or would like to see an experienced developer work through it, click “**Get Help**“ to see a **project walkthrough video**.

**Tasks**

**9/9Complete**

Mark the tasks as complete by checking them off

**1.**

In the first line of the program, define a variable called userName that is set to an empty string.

If the user wants, he or she can enter his or her name in between the quotation marks.

Stuck? Get a hint

**2.**

Below this variable, create a ternary expression that decides what to do if the user enters a name or not. If the user enters a name — like 'Jane' — use string interpolation to log Hello, Jane! to the console. Otherwise, simply log Hello!.

Hint

If the user doesn’t enter a name, the condition userName ? will evaluate to falsy because it will be an empty string.

For example:

condition ? console.log('true') : console.log('false');

**3.**

Create a variable named userQuestion. The value of the variable should be a string that is the question the user wants to ask the Magic Eight Ball.

Stuck? Get a hint

**4.**

Write a console.log() for the userQuestion, stating what was asked. You can include the user’s name in the console.log() statement, if you wish!

Stuck? Get a hint

**5.**

We need to generate a random number between 0 and 7.

Create another variable, and name it randomNumber. Set it equal to this expression, which uses two methods from the Math library.

Math.floor(Math.random() \* 8);

Check the hint to learn how it works!

Hint

Math.random() returns a value between 0 (inclusive) and 1 (exclusive).

In order to make this set of numbers range from 0 (inclusive) to 8 (exclusive) we can multiple the returned value by 8.

Finally, to ensure we only have whole numbers from 0 to 7 we can round down using Math.floor().

const randomNumber = Math.floor(Math.random() \* 8);

**6.**

Create one more variable named eightBall, and set it equal to an empty string. We will save a value to this variable in the next steps, depending on the value of randomNumber.

Hint

let eightBall = '';

**7.**

We need to create a control flow that takes in the randomNumber we made in step 4, and then assigns eightBall to a reply that a Magic Eight Ball would return. Think about utilizing if/else or switch statements. Here are 8 Magic Eight Ball phrases that we’d like to save to the variable eightBall:

* 'It is certain'
* 'It is decidedly so'
* 'Reply hazy try again'
* 'Cannot predict now'
* 'Do not count on it'
* 'My sources say no'
* 'Outlook not so good'
* 'Signs point to yes'

If the randomNumber is 0, then save an answer to the eightBall variable; if randomNumber is 1, then save the next answer, and so on. If you’re feeling creative, make your own responses!

Hint

switch (condition) {

case 0:

eightBall = 'prediction here';

break;

case 1:

eightBall = 'another prediction here';

break;

// additional cases...

}

**8.**

Write a console.log() to print the Magic Eight Ball’s answer, the value of the eightBall variable.

Hint

console.log(`The eight ball answered: ${eightBall}`);

**9.**

Run your program a few times to see random results appear in the console!

If you want extra practice:

* If you started with a switch statement, convert it to if/else if/else statements.
* If you started with if/else if/else statements, convert them to a switch statement.