**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.

**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!.

**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.

**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!

**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!

**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.

**7.**

We need to create a control flow that takes in the randomNumber we made in step 5, 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!

**8.**

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

**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.