



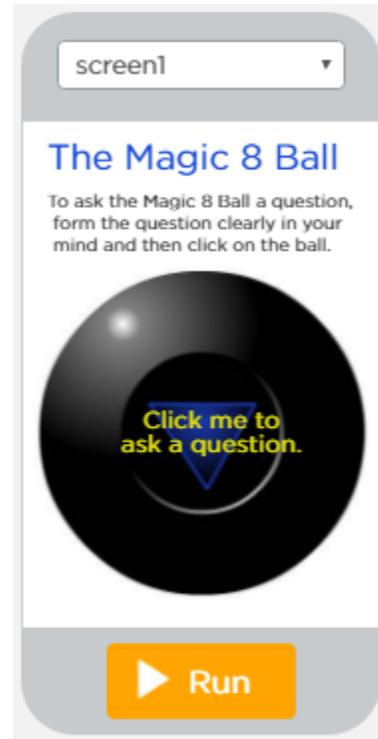
## A2: Magic 8 Ball

This assignment asks you to write a program that replicates the classic Magic 8 Ball toy from the 1960's. Your program (like the original 8 Ball) will not really pay any attention to the user's question—it will simply take the question and discard it. Then it always gives one of several "canned" answers. The original Magic 8 Ball had the answers printed on the sides of two eight sided dice.

Make this screen.

The image is named *eightBall*.

There is a label on top of it (that says: Click me to ask a question), this is named *answer*



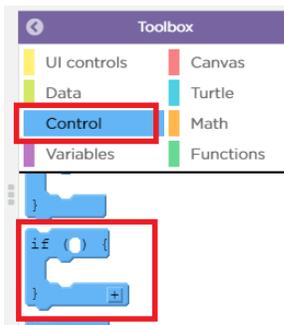
Make an onEvent for the image:

```
onEvent (▼ "eightBall", ▼ "click", function (event) {  
  ;  
});
```

Create a variable. Make it have a random number between 1 and 8.

```
var x = randomNumber (1, 8);
```

Choose an if block.



Drag in an math block, set  $x == 1$ .



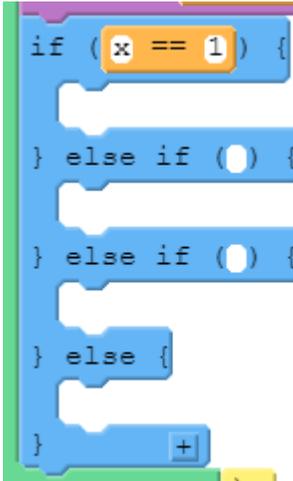
```
if (x == 1) {  
}  
+
```

Hit the little + sign to add a clause:



```
if (x == 1) {  
}  
+
```

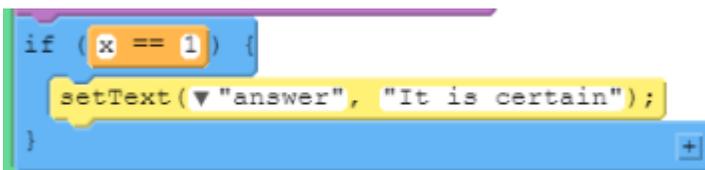
The more times you click +, the more clauses you add:



```
if (x == 1) {  
}  
} else if () {  
}  
} else if () {  
}  
} else {  
}  
+
```

You need 8 clauses in total. One will be an if, 6 will be else ifs and one will be an else.

Each one needs a different Magic 8 Ball statement.



```
if (x == 1) {  
  setText(▼"answer", "It is certain");  
}  
+
```

The original 16 answers to go in your if statements are (choose 8):

- |                          |                               |
|--------------------------|-------------------------------|
| 1. outlook not so good   | 9. most likely                |
| 2. don't count on it     | 10. you may rely on it        |
| 3. my sources say no     | 11. cannot predict now        |
| 4. without a doubt       | 12. outlook good              |
| 5. reply hazy, try again | 13. better not tell you now   |
| 6. it is certain         | 14. very doubtful             |
| 7. my reply is no        | 15. yes definitely            |
| 8. as I see it yes       | 16. concentrate and ask again |

Run it. You may notice a problem: If they click on the answer label directly, the answer won't change. Let's handle that now.

Make a new onEvent for the image.

```
onEvent(▼"answer", ▼"click", function(event) {  
  }  
);
```

Switch to text mode and cut and paste the if from the eightBall's onEvent into the answer's onEvent.

Be careful of the brackets.