4 more challenges to get your next star!

Points: **13/17**

Day 5: Inheritance ★

Problem   Submissions   Leaderboard   Editorial 🔒   Topics
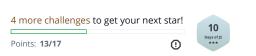
Objective

In this challenge, we practice implementing inheritance and use JavaScript prototypes to add a new method to an existing prototype. Check out the attached Classes tutorial to refresh what we've learned about these topics.

Task

We provide the implementation for a Rectangle class in the editor. Perform the following tasks:

1. Add an area method to Rectangle's prototype.

2. Create a Square class that satisfies the following:

   ○ It is a subclass of Rectangle.

   ○ It contains a constructor and no other methods.

   ○ It can use the Rectangle class' area method to print the area of a Square object.

Locked code in the editor tests the class and method implementations and prints the area values to STDOUT.

Change Theme   Language: JavaScript (Node.js)

```javascript
1    class Rectangle {
2        constructor(w, h) {
3            this.w = w;
4            this.h = h;
5        }
6    }
7
8    Rectangle.prototype.area=function(){
9        return this.w*this.h
10   }
11
12   class Square extends Rectangle{
13       constructor(s)
14       {
15           super(s,s)
16       }
17   }
18
19   if (JSON.stringify(Object.getOwnPropertyNames(Square.prototype)) === JSON.stringify([
     'constructor' ])) {
20       const rec = new Rectangle(3, 4);
21       const sqr = new Square(3);
22
23       console.log(rec.area());
```

Line: 18 Col: 1

⬆ Upload Code as File   ☐ Test against custom input   **Run Code**   **Submit Code**

Congratulations!

You have passed the sample test cases. Click the submit button to run your code against all the test cases.

✓ **Sample Test case 0**

Your Output (stdout)

```
1    12
2    9
```

Expected Output   Download

```
1    12
2    9
```