

So if you want to play with ES6, or set it up in one of your projects, take a look at these transpilers, and add a build step to your process. It will take your ES6 source files and generate the equivalent ES5 code. It works very well but, of course, some of the new features are quite hard or impossible to transform in ES5, as they just did not exist. However, the current state is largely good enough for us to use without worrying, so let's have a look at all these shiny new things we can do in JavaScript!

3.2. let

If you have been writing JS for some time, you know that the `var` declaration is tricky. In pretty much any other languages, a variable is declared where the declaration is done. But in JS, there is a concept, called "hoisting", which actually declares a variable at the top of the function, even if you declared it later.

So declaring a variable like `name` in the `if` block:

```
function getPonyFullName(pony) {  
  if (pony.isChampion) {  
    var name = 'Champion ' + pony.name;  
    return name;  
  }  
  return pony.name;  
}
```

is equivalent to declaring it at the top of the function:

```
function getPonyFullName(pony) {  
  var name;  
  if (pony.isChampion) {  
    name = 'Champion ' + pony.name;  
    return name;  
  }  
  // name is still accessible here  
  return pony.name;  
}
```

ES6 introduces a new keyword for variable declaration, `let`, behaving much more like what you would expect:

```
function getPonyFullName(pony) {  
  if (pony.isChampion) {  
    let name = 'Champion ' + pony.name;  
    return name;  
  }  
  // name is not accessible here  
  return pony.name;  
}
```