



Var, Let, and Const



Scoping


Essentially, scoping means “where is this variable available to me?”

Var, Let, and Const all differ in terms of scope.

Var - function scope

Example 1 - variables defined within a function

```
function test(){  
    var a = 100;  
    console.log(a);  
}  
  
console.log(a);    //error as a is inaccessible
```



Example 2 - variables defined outside of a function

```
var age = 100;  
if(age > 12){  
    var dogYears = age * 7;  
    console.log("You are " + dogYears + " dog years  
old!");  
}  
  
console.log(dogYears);    //dogYears is accessible  
                           as it was defined outside  
                           of a function and is  
                           therefore global
```

Let - block scope (just look for {})

Example 3

```
function test(){  
  var a = 100;  
  
  if(a == 100){  
    var a = 200;  
    console.log(a);    //200 is printed  
  }  
  
  console.log(a);      //200 is printed  
}
```

Example 4

```
function test(){  
  let a = 100;  
  
  if(a == 100){  
    let a = 200;  
    console.log(a);    //200 is printed  
  }  
  
  console.log(a);      //100 is printed  
}
```

Const - block scope

Example 5

```
function test(){  
  const a = 100;  
  
  if(a == 100){  
    let a = 200;  
    console.log(a);    //200 is printed  
  }  
  
  let a = 200;          //error  
  const a = 200;        //error  
  var a = 200;          //error  
}
```