**Principle**

1. Enumeration should be used to iterate over nonarray objects.
2. It's important to use the method **hasOwnProperty**()when iterating over object properties to filter out properties that come down the prototype chain.

[复制代码](javascript:void(0);)

// the object

var man = {

hands: 2,

legs: 2,

heads: 1

};

// somewhere else in the code

// a method was added to all objects

if (typeof Object.prototype.clone = = = "undefined") {

Object.prototype.clone = function () {};

}

// 1. for-in loop

for (var i in man) {

if (man.hasOwnProperty(i)) { // filter

console.log(i, ":", man[i]);

}

}

/\*

result in the console

hands : 2

legs : 2

heads : 1

\*/

// 2. antipattern:

// for-in loop without checking hasOwnProperty()

for (var i in man) {

console.log(i, ":", man[i]);

}

/\*

result in the console

hands : 2

legs : 2

heads : 1

clone: function()

\*/

[复制代码](javascript:void(0);)

Call method off of the Object.prototype to avoid naming collisions that man object redefined hasOwnProperty. And use a local variable to cache it.

[复制代码](javascript:void(0);)

var i,

hasOwn = Object.prototype.hasOwnProperty;

for (i in man) {

if (hasOwn.call(man, i)) { // filter

console.log(i, ":", man[i]);

}

}

[复制代码](javascript:void(0);)