

```
1 function Stack() {
2   this.stack = [];
3 }
4
5 Stack.prototype.push = function(value) {
6   this.stack.push(value);
7 };
8 Stack.prototype.pop = function() {
9   return this.stack.pop();
10 };
11 Stack.prototype.peek = function() {
12   return this.stack[this.stack.length - 1];
13 };
14 Stack.prototype.length = function() {
15   return this.stack.length;
16 };
17 Stack.prototype.print = function() {
18   console.log(this.stack.join(' '));
19 };
20
21 var stack = new Stack();
22 stack.push(1);
23 stack.push(2);
24 stack.push(3);
25 stack.print(); // => 1 2 3
26 console.log('length is 3:', stack.length()); // => 3
27 console.log('peek is 3:', stack.peek()); // => 3
28 console.log('pop is 3:', stack.pop()); // => 3
29 stack.print(); // => 1 2
30 console.log('pop is 2:', stack.pop()); // => 2
31 console.log('length is 1:', stack.length()); // => 1
32 console.log('pop is 1:', stack.pop()); // => 1
33 stack.print(); // => ''
34 console.log('peek is undefined:', stack.peek()); // => undefined
35 console.log('pop is undefined:', stack.pop()); // => undefined
36
```