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1 <!-- I found the concept of encapsulation a bit difficult to get my head around. But
  with some help from my fellow classmates I finally got the picture -->
2 <!-- In the end, I think this encapsulation way of doing JavaScript to be pretty cool
  -->
3 <!DOCTYPE html>
4 <html lang="en">
5 <head>
6   <meta charset="UTF-8">
7   <meta name="viewport" content="width=device-width, initial-scale=1.0">
8   <title>IS 542 - Homework 3</title>
9   <script>
10     const validator = (function() {
11       let isValid = true;
12       regexEmailValid = /^((^[<>()\\[\]\\.\\.,;:\\s@"]+(\\.^[<>()\\[\]\\.\\.,;:\\s@"]+)*|
  (".+")@((\\[[0-9]{1,3}\\.[0-9]{1,3}\\.[0-9]{1,3}\\.[0-9]{1,3}\\)|((\\[a-zA-Z\\-0-9]+\\.)+[a-
  zA-Z]{2,})))$/;
13
14       return {
15         isNumeric: function(text) {
16           isValid = !isNaN(text);
17         },
18         isInteger: function(text) {
19           isValid = Number.isInteger(text);
20         },
21         isPositiveInteger: function(text) {
22           isValid = Number.isInteger(text) && text > 0;
23         },
24         isNegativeInteger: function(text) {
25           isValid = Number.isInteger(text) && text < 0;
26         },
27         isNonNegativeInteger: function(text) {
28           isValid = Number.isInteger(text) && text >= 0;
29         },
30         isInRange: function(text, m, n) {
31           if (!isNaN(text)) {
32             if (m === undefined) {
33               isValid = text <= n;
34             } else if (n === undefined) {
35               isValid = text >= m;
36             } else {
37               isValid = text <= n && text >= m;
38             }
39           } else {
40             isValid = false;
41           }
42         },
43         isValidEmail: function(text) {
44           isValid = regexEmailValid.test(text);
45         },
46         isEmpty: function(text) {
47           isValid = (typeof text === "string" && text !== "");
48         },
49         lengthIsInRange: function(text, m, n) {
50           if (typeof text === "string") {
51             if (m === undefined) {
52               isValid = text.length <= n;
53             } else if (n === undefined) {
54               isValid = text.length >= m;
55             } else {
56               isValid = text.length <= n && text.length >= m;

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57         }
58     } else {
59         isValid = false;
60     }
61 },
62 matchesRegex: function(text, regex) {
63     isValid = regex.test(text);
64 },
65 isValid: function() {
66     return isValid;
67 },
68 reset: function() {
69     isValid = true;
70 }
71 };
72 }());
73 </script>
74 </head>
75 <body>
76
77 </body>
78 </html>
```