```
1 <script>
 2 const validator = (function () {
 3
       let is valid = true;
 4
 5
       return {
 6
       isNumeric: function (text) {
 7
           switch (typeof text) {
 8
                case "number":
 9
                    break;
10
                case "string":
                    this.is valid = !isNaN(text);
11
12
                    break:
13
                default:
14
                    this.is_valid = false;
15
                    break;
16
           }
17
           return this.is valid;
18
        },
19
       isInteger: function (text) {
           if (validator.isNumeric(text)) {
20
21
                if (typeof text === "string") {
22
                    text = Number(text);
23
24
                if (!Number.isInteger(text)) {
25
                    this.is_valid = false;
26
                    return false;
27
                }
28
           }
29
           else {
                this.is valid = false;
30
31
                return false;
32
           }
33
           return this.is_valid;
        },
34
35
       isNegativeInteger: function (text) {
36
           if (validator.isInteger(text)) {
37
                text = Number(text);
38
                if (text < 0) {
39
                    return true;
40
                }
41
                else {
                    this.is valid = false;
42
43
                    return false;
44
                }
45
           }
46
           else {
47
                this.is_valid = false;
48
                return false;
49
           }
50
        },
       isPositiveInteger: function (text) {
51
52
           if (validator.isInteger(text)) {
53
                text = Number(text);
54
                if (text > 0) {
55
                    return true;
56
                }
57
                else {
58
                    this.is_valid = false;
59
                    return false;
60
                }
61
           }
```

```
62
            else {
 63
                 this.is_valid = false;
 64
                 return false;
 65
            }
 66
         },
 67
        isNonNegativeInteger: function (text) {
 68
            if (validator.isInteger(text)) {
 69
                 text = Number(text);
 70
                 if (text >= 0) {
 71
                     return true;
                 }
 72
 73
                 else {
                     this.is valid = false;
 74
 75
                     return false;
 76
                 }
 77
            }
 78
            else {
 79
                 this.is valid = false;
 80
                 return false;
 81
            }
 82
         },
 83
        isInRange: function (text, m, n) {
 84
            if (!validator.isNumeric(text)) {
 85
                 this.is_valid = false;
                 return false;
 86
 87
            }
            if (typeof m !== "undefined") {
 88
                 if (!validator.isNumeric(m)) {
 89
 90
                     this.is_valid = false;
 91
                     return false;
 92
                 if (Number(text) < Number(m)) {</pre>
 93
 94
                     this.is_valid = false;
 95
                     return false;
                 }
 96
 97
 98
            if (typeof n !== "undefined") {
                 if (!validator.isNumeric(n)) {
 99
                     this.is_valid = false;
100
101
                     return false;
102
                 }
                 if (Number(text) > Number(n)) {
103
                     this.is_valid = false;
104
                     return false;
105
106
                 }
107
            }
            return true;
108
109
         },
110
        isValidEmail: function (text) {
            let re = /[a-z0-9!#$%&'*+/=?^{`}{|}~-]+(?:\.[a-z0-9!#$%&'*+/=?
111
       {|}~-]+)*@(?:[a-z0-9](?:[a-z0-9-]*[a-z0-9])?\.)+[a-z0-9](?:[a-z0-9-]*[a-z0-9])?/g
112
            if (re.test(text)) {
113
                 return true;
            }
114
            else {
115
116
                 this.is_valid = false;
117
                 return false;
118
            }
119
         },
        isNonEmpty: function (obj) {
120
            if (typeof obj === "boolean") {
121
```

```
122
                 return true;
123
            }
124
            if (obj === 0) {
125
                 return true;
126
127
            for(var key in obj) {
128
                 if(obj.hasOwnProperty(key))
129
                     return true;
130
131
            this.is_valid = false;
            return false;
132
133
         },
        matchesRegex: function (text, regex) {
134
135
            let re = new RegExp(regex);
            if (re.test(text)) {
136
137
                 return true;
138
            }
            else {
139
                 this.is valid = false;
140
141
                 return false;
            }
142
143
         },
144
        lengthIsInRange: function (text, m, n) {
            if (typeof text !== "string") {
145
146
                 this.is_valid = false;
                 return false;
147
            }
148
149
            validator.isInRange(text.length, m, n);
150
         },
        isValid: function () {
151
152
            return this.is valid;
153
        },
154
        reset: function () { this.is_valid = true; },
155
        logStatus: function () {
156
            if (validator.isValid()) {
157
                 console.log('All is well');
158
            } else {
159
                 console.log('Something failed validation'); }
160
        },
161
        logNegativeStatus: function () {
            if (validator.isValid()) {
162
                 console.log('Something failed validation');
163
            } else {
164
                 console.log('All is well'); }
165
166
        }
167
        };
       }());
168
169
170
       validator.reset();
171
172
       validator.isNumeric(5);
173
       validator.isNumeric('5');
174
       validator.isInteger(5);
175
       validator.isInteger('50');
176
       validator.logStatus();
177
       validator.isInteger("one");
178
179
       validator.logNegativeStatus();
180
       validator.reset();
181
       validator.isPositiveInteger(5);
182
       validator.isNegativeInteger(-5);
```

```
183
       validator.logStatus();
184
       validator.isNegativeInteger(-5.6);
185
       validator.logNegativeStatus();
186
       validator.reset();
187
188
       validator.isNonNegativeInteger(0);
189
       validator.isInRange(50, "4", "1000");
validator.isInRange("50", 4, "1000");
190
191
       validator.isValidEmail("kylebharrison16@gmail.com");
192
       validator.isValidEmail("kyle@c.d");
193
194
       validator.isNonEmpty(false);
       validator.isNonEmpty(".");
195
196
       validator.logStatus();
197
       validator.lengthIsInRange("12345", 5, 5);
198
       validator.matchesRegex("hello", "^hello[, my friend]?");
199
200
       validator.isNonEmpty("89");
       validator.logStatus();
201
202
203 </script>
204
205
```