```
1    <!-- CHAP09
2    FULL LISTING (NOT IN BOOK) -->
3    <div id="calculette">
4        <header>
5        <h1>Super-Calculette JS</h1>
6        <p>Cette calculatrice sert à découvrir les opérateurs de JavaScript</p>
7        </header>
8        <div class="input-area">
9        <h2>Etape 1 : Premier opérande</h2>
10           <input type="text" id="operand1" value="1" />
11           <select id="operand1-type">
12               <option value="number">Valeur numérique</option>
13               <option value="string">Chaîne</option>
14           </select>
15       </div>
16
17       <div class="input-area">
18       <h2>Etape 2 : Choix de l'opérateur</h2>
19           <div class="operator-choices">
20           <h3>Opérateurs arithmétiques</h3>
21
22           <input type="radio" name="operator" value="+" checked>+ 
23           <input type="radio" name="operator" value="-">- 
24           <input type="radio" name="operator" value="*">* 
25           <input type="radio" name="operator" value="/">/ 
26           <input type="radio" name="operator" value="%">% 
27
28           <h3>Opérateur sur chaîne de texte (string)</h3>
29           <input type="radio" name="operator" value="concat">+ (concaténation) 
30
31           <h3>Opérateurs de comparaison</h3>
32           <input type="radio" name="operator" value="==">== 
33           <input type="radio" name="operator" value="===">=== 
34           <input type="radio" name="operator" value="!=">!= 
35           <input type="radio" name="operator" value="!==">!== 
36           <input type="radio" name="operator" value=">">&gt; 
37           <input type="radio" name="operator" value=">=">&gt;= 
38           <input type="radio" name="operator" value="<">&lt; 
39           <input type="radio" name="operator" value="<=">&lt;= 
40           </div>
41       </div>
42
43       <div class="input-area">
44       <h2>Etape 2 : Second opérande</h2>
45       <input type="text" id="operand2" value="1">
46       <select id="operand2-type">
47           <option value="number">Valeur numérique</option>
48           <option value="string">Chaine de caractères</option>
49       </select>
50       </div>
51
52       <div class="input-area">
53       <h2>Etape 4 : On lance le calcul</h2>
54       <input type="submit" id="submit" value="Calculer!">
55       </div>
56   <hr>
57       <div class="output-area">
58       <h2>Résultat</h2>
59
60       <h3>Opération</h2>
61       <span id="final-operation">???</span>
62
63
64       <h3>Valeur renvoyée :</h2>
65       <span id="result">???</span>
66       </div>
67
```

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67  </div>
68
69  =============================CSS
70  body {
71      font-family: "Courier New", Courier, monospace;
72      font-size: .85em;
73  }
74  header {
75      text-align: center;
76  }
77  h2 {
78      text-align: center;
79      font-size: 1.1em;
80      border-top: 2px dashed yellow;
81      border-bottom: 1px dashed yellow;
82  }
83  input[type=text] {
84      width: 40px;
85      height: 20px;
86      margin-left: 20px;
87      background-color: #DADADA;
88      font-size: 1.2em;
89  }
90  input[type=submit] {
91      width: 200px;
92      font-size: 2em;
93  }
94  #calculette {
95      border: 1px solid #dadada;
96      border-radius: 4px;
97      padding: 2px;
98  }
99  .input-area {
100     background-color: #42FF8C;
101     padding: 8px;
102     margin: 8px;
103     text-align: center;
104     border-radius: 8px;
105 }
106 .operator-choices {
107     text-align: left;
108 }
109 .output-area {
110     background-color: #333333;
111     color: #FFFFFF;
112     padding: 4px;
113     margin: 2px;
114     font-size: 1.1em;
115 }
116
117 =========================================JS
118 //when the button is clicked
119 document.getElementById("submit").addEventListener("click",calculateIt);
120
121 function calculateIt() {
122
123     //create some variables
124     var myOperator;
125     var returnValue;
126
127     //get the operands
128     var operand1 = document.getElementById("operand1").value;
129     var operand2 = document.getElementById("operand2").value;
130
131     //get the operand types
132     var select1 = document.getElementById("operand1-type");
133     var select2 = document.getElementById("operand2-type");
134
```

```
134
135      var operand1type = select1.value;
136      var operand2type = select2.value;
137
138      //get the operator
139      var radios = document.getElementsByName('operator');
140
141      //convert the operands
142      switch (operand1type) {
143          case "string":
144              operand1 = String(operand1);
145              break;
146          case "number":
147              operand1 = Number(operand1);
148              break;
149      }
150
151      switch (operand2type) {
152          case "string":
153              operand2 = String(operand2);
154              break;
155          case "number":
156              operand2 = Number(operand2);
157              break;
158      }
159      //loop through each possible operand value and find the checked one
160      for (var i = 0, length = radios.length; i < length; i++) {
161
162          if (radios[i].checked) {
163              myOperator = radios[i].value;
164
165              //do a different operation depending on which operator was selected
166              switch (radios[i].value) {
167                  case "+":
168                      returnValue = operand1 + operand2;
169                      break;
170                  case "-":
171                      returnValue = operand1 - operand2;
172                      break;
173                  case "*":
174                      returnValue = operand1 * operand2;
175                      break;
176                  case "/":
177                      returnValue = operand1 * operand2;
178                      break;
179                  case "%":
180                      returnValue = operand1 % operand2;
181                      break;
182                  case "concat":
183                      returnValue = operand1 + operand2;
184                      myOperator = "+";
185                      break;
186                  case "==":
187                      returnValue = operand1 == operand2;
188                      break;
189                  case "===":
190                      returnValue = operand1 === operand2;
191                      break;
192                  case "!=":
193                      returnValue = operand1 != operand2;
194                      break;
195                  case "!==":
196                      returnValue = operand1 !== operand2;
197                      break;
198                  case ">":
199                      returnValue = operand1 > operand2;
200                      break;
201
```

```
201                    case ">=":
202                        returnValue = operand1 >= operand2;
203                        break;
204                    case "<":
205                        returnValue = operand1 < operand2;
206                        break;
207                    case "<=":
208                        returnValue = operand1 <= operand2;
209                        break;
210            }

212            break;
213        }
214    }

216    //display the operation

218    if (typeof(operand1)==="string"){
219        operand1 = '"' + operand1 + '"';
220    }
221    if (typeof(operand2)==="string"){
222        operand2 = '"' + operand2 + '"';
223    }
224    document.getElementById("final-operation").innerHTML = operand1 + myOperator +
   operand2;

226    //display the return value
227    document.getElementById("result").innerHTML = returnValue;
228 };
```