This homework is due on 10/06 11:59pm.

Write a program that takes one int as an input from the keyboard, then outputs 1 (true) if both of the two following conditions are satisfied:

(1) The input int is a non-negative number.
(2) The input int is within 2 of a multiple of 10.

Otherwise, outputs 0 (false).

Hint: consider using modulus operator.

The table below contains the test cases you can use to verify the correctness of your program:

<table>
<thead>
<tr>
<th>Inputs:</th>
<th>12</th>
<th>17</th>
<th>19</th>
<th>31</th>
<th>6</th>
<th>10</th>
<th>11</th>
<th>21</th>
<th>22</th>
<th>23</th>
<th>54</th>
<th>155</th>
<th>158</th>
<th>3</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outputs:</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

All programming assignments should include the following documentation on the source code:

```
// Course:          CS102
// Student Name:    John Smith
// Homework Number: 1
```

Submit the source code to the Drop box of Angel.