Homework Assignment 3
Due date: DO NOT SUBMIT

Problem 1

Write a method that given a String object checks its validity. A valid string should contain only letters (upper case and/or lower case). The method should return true, if the string is valid and false otherwise. The method should be simple. It should take advantage of methods available in the String and Character classes.

Note: Comment your code! Tell the reader what you are doing.

Problem 2

Write a method that provide recursive implementation for selection sort.

Note: Comment your code! Tell the reader what you are doing.

Problem 3

Given the following array of integers, show what the array will look like after each iteration of the outer loop of insertion sort. Indicate where the ”sorted” part ends after each iteration. The elements should be sorted from smallest to largest.

<table>
<thead>
<tr>
<th>index</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>item</td>
<td>7</td>
<td>32</td>
<td>12</td>
<td>3</td>
<td>0</td>
<td>64</td>
<td>23</td>
<td>12</td>
<td>3</td>
<td>45</td>
</tr>
</tbody>
</table>

How and what to submit

You do not need to submit this homework, but make sure that you know how to do problems like these.