Arrays
1. What is an array in Java?

2. Declare a 2-dimensional array called table of base type int with 4 rows and 5 columns in each row.

3. Write code that will print out the contents of the array you created in Problem 2. Each element should be separated with a space, and each row should be on its own line of text.

4. Consider the 1-D integer array {13, 9, 15, 2}. Show the state of this array after each iteration of the outer loop for bubble and selection sorting algorithms

<table>
<thead>
<tr>
<th>Bubble Sort</th>
<th>Selection Sort</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. 13, 9, 15, 2</td>
<td>0. 13, 9, 15, 2</td>
</tr>
</tbody>
</table>
Classes
5. Design a class that represents a personal bank account. Give the class at least two instance variables and three methods. Draw the UML diagram for this class.

6. Write the Java code that defines the class you designed in Problem 5. Include the name of the class, declare the instance variables, and write the methods. (At least include the method headers; if you don’t have enough room for the method bodies, leave them empty { /* … */ }).