Mini exercises

1. Modify the **`readInteger()`** method to accept a second string that is a custom error message when the user inputs a non-numeric value.
   a. Test that your modified code works.
2. Modify the **`readInteger()`** method to the additional parameters that specify the minimum and maximum value that the user can input.
   a. Test that your modified code works.
   b. What happens if the minimum value is bigger that the maximum?
   c. What happens if the minimum value is the same as the maximum?
3. Design a new method called validateInput(), which has the following *signature*:

   ```
   boolean validNumber(int value, int[] validValues)
   ```

   This method will return true if *value* exists inside the array called *validValues*, and will be used like this (note the not operator):

   ```
   if(!validInput(userNumber, new int[] {9, 18, 999, 100})) {
     // output error message to the user
   }
   ```

   Before writing the code solution, identify what steps are required first.
4. Write a new method to calculate the tax owed, which is based upon the gross pay and the tax rate.
   Replace the tax calculation in the main() method with a call to your new method.