

Homework 4

Before attempting this project, be sure you have completed all of the reading assignments, hands-on labs, discussions, and assignments to date.

Write a Java program that displays the State bird and flower. **You should use your IDE for this exercise.** You should also use Java classes to their full extent to include multiple methods and at least two classes. The program should prompt the user to enter a State and print both the State bird and flower. The user should be able to enter a State without worrying about case. (e.g. Users could enter Maryland, maryland, MARYLAND or any other possible combination of lower and upper case characters. States may also contain leading and trailing white spaces. Hint: Store the State information in a multi-dimensional array. The program should continue to prompt the user to enter a state until "None" is entered. After all States have been entered by the user, the program should display a summary of the results. You will need to do some research to find the State birds and flowers. Here is a sample run:

```
Enter a State or None to exit:  
Maryland  
Bird: Baltimore Oriole  
Flower: Black-eyed Susan  
Enter a State or None to exit:  
Delaware  
Bird: Blue Hen Chicken  
Flower: Peach Blossom  
Enter a State or None to exit:  
None  
  
***** Thank you *****  
A summary report for each State, Bird, and Flower is:  
Maryland, Baltimore Oriole, Black-eyed Susan  
Delaware, Blue Hen Chicken, Peach Blossom  
Please visit our site again!
```

Create a test class that constructs at least 3 States objects. For each of the objects constructed, demonstrate the use of each of the methods. **Be sure to use your IDE** to accomplish this assignment.

The google recommended Java style guide, provided as link in the week 2 content, should be used to format and document your code. Specifically, the following style guide attributes should be addressed:

- Header comments include filename, author, date and brief purpose of the program.
- In-line comments used to describe major functionality of the code.
- Meaningful variable names and prompts applied.
- Class names are written in UpperCamelCase.
- Variable names are written in lowerCamelCase.
- Constant names are written in All Capitals.
- Braces use K&R style.

Submission requirements

Deliverables include all Java files (.java) and a single word (or PDF) document. The Java files should be named appropriately for your applications. The word (or PDF) document should include screen captures showing the successful compiling and running of each of the test cases. Each screen capture should be properly labeled clearly indicated what the screen capture represents. The test cases table should be included in your word or PDF document and properly labeled as well.

Submit your files to the Homework 4 assignment area no later than the due date listed in your LEO classroom. You should include your name and HW4 in your word (or PDF) file submitted (e.g. firstnamelastnamehw4.docx or firstnamelastnamehw4.pdf)

Grading Rubric:

The following grading rubric will be used to determine your grade:

Attribute	Meets	Does not meet
StatesDataEntry Class	10 points The program prompts the user to enter a State and prints both the State bird and flower. State data entry is case insensitive. States data may also contain leading and trailing white spaces. The program continues to prompt the user to enter a state until "None" is entered. After all data has been entered by the user, the program displays a summary report of all state requests. An IDE (Netbeans or Eclipse) was used for this assignment.	0 points The program does not prompt the user to enter a State and prints both the State bird and flower. State data entry for case insensitive input are not handled properly. States data containing leading and trailing white spaces are not handled properly. The program does not continue to prompt the user to enter a state until "None" is entered. After all data has been entered by the user, the program does not display a summary report of all state requests. An IDE (Netbeans or Eclipse) was not used for this assignment.
Test StatesDataEntry Class	5 points	0 points

	<p>Test class was used to construct at least 3 States objects.</p> <p>For each of the objects constructed, the use of each of the methods was demonstrated</p> <p>An IDE (Netbeans or Eclipse) was used for this assignment.</p>	<p>Test class was not used to construct at least 3 States objects.</p> <p>For each of the objects constructed, the use of each of the methods was not demonstrated</p> <p>An IDE (Netbeans or Eclipse) was not used for this assignment.</p>
Test Cases	<p>5 points</p> <p>A minimum of 3 test cases was used in the form of table with columns indicating the input values, expected output, actual output and if the test case passed or failed. The table should contain 4 columns with appropriate labels and a row for each test case.</p> <p>Test cases were included in the supporting word or PDF documentation.</p>	<p>0 points</p> <p>No test cases were provided.</p>
Documentation and Style guide	<p>5 points</p> <p>Screen captures were provided and labeled for compiling your code, and running each of your 5 test cases.</p> <p>Header comments include filename, author, date and brief purpose of the program.</p> <p>In-line comments used to describe major functionality of the code.</p> <p>Meaningful variable names and prompts applied.</p>	<p>0 points</p> <p>No documentation included</p> <p>Java style guide was not used to prepare the Java code.</p>

	<p>Class names are written in UpperCamelCase.</p> <p>Variable names are written in lowerCamelCase.</p> <p>Constant names are in written in All Capitals.</p> <p>Braces use K&R style.</p>	
--	---	--