**Lab 6**

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**Part A. Vowels**

1. isVowel
2. The tests did not pass. We need to change the return statement for isVowel.

public class Word

{

/\*\*

Tests whether a letter is a vowel

@param letter a string of length 1

@return true if letter is a vowel

\*/

public boolean isVowel(String letter)

{

String lower = letter.toLowerCase();

if (lower.equals("a"))

return true;

else if (lower.equals("e"))

return true;

else if (lower.equals("i"))

return true;

else if (lower.equals("o"))

return true;

else if (lower.equals("u"))

return true;

else if (lower.equals("y"))

return true;

else

return false;

}

}

4.public class Word

{

/\*\*

Tests whether a letter is a vowel

@param letter a string of length 1

@return true if letter is a vowel

\*/

public boolean isVowel(String letter)

{

String lower = letter.toLowerCase();

return "aeiouy".contains(lower);

}

}

5. I like the contains method because it is short and does the same work.

**Part B**

1. return !(row != 0 && column != 0);
2. return (row == column);
3. return (row % 2 == 0);
4. return !(column % 2 == 0);
5. return (row % 2 == 1 && column % 2 == 1 || row % 2 == 0 && column % 2 == 0);
6. return (row % 2 == 0 || column % 2 == 0);
7. return (row >= 3 && row < 7);
8. return (row >= 3 && row < 7 && column >= 3 && column < 7);
9. return (row >= 2 && row < 5 || column >= 3 && column < 7);
10. 