Cool and worthy

In this problem you will complete several static methods in the `CoolAndWorthy` class. The `CoolAndWorthy` class has no instance variables and no constructor.

The first method to complete is: `boolean noConsecutiveVowels(String wd)`. `noConsecutiveVowels` returns true if `wd` does not contain consecutive vowels (Multiple vowels that follow directly after one another). (Consider only a, e, i , o and u as vowels – do not consider y to be a vowel).
The precondition for this method `wd` will only contain lower case letters
The following code shows the results of the `noConsecutiveVowels` method.

The following code	Returns
`CoolAndWorthy.noConsecutiveVowels("vacuum");`	`false`
`CoolAndWorthy.noConsecutiveVowels("flyby");`	`true`

The second method to complete is: `boolean noCommonlyUsedBigrams(String wd)`. `noCommonlyUsedBigrams` returns true if `wd` does **not** contain any of the five bigrams: th, he, in, er, an.

The following code shows the results of the `noCommonlyUsedBigrams` method.

The following code	Returns
`CoolAndWorthy.noCommonlyUsedBigrams("cattree");`	`true`
`CoolAndWorthy.noCommonlyUsedBigrams("biometer");`	`false`

The third method to complete is: `boolean containsSeldomUsedLetters(String wd)`. `containsSeldomUsedLetters` returns true if `wd` contains either:

- One of the four fewest used letter (x, j, q, or z) or
- Two of the following letters (y, b, v, or k) anywhere in `wd` - Same letter twice satisfies

The following code shows the results of the `containsSeldomUsedLetters` method.

The following code	Returns
`CoolAndWorthy.containsSeldomUsedLetters("computer");`	`false`
`CoolAndWorthy.containsSeldomUsedLetters("yokel");`	`true`
`CoolAndWorthy.containsSeldomUsedLetters("tortrix");`	`true`
`CoolAndWorthy.containsSeldomUsedLetters("dekko");`	`true`

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The fourth method to complete is: `boolean containsTallShortAndDigLetters(String wd)`. `containsTallShortAndDigLetters` returns true if `wd` contains at least one tall letter, one short letter and one letter that digs.

- Tall letters are: b, d, f, h, k, l, and t
- Short letters are: a, c, e, i, m, n, o, r, s, u, v, w, x, z
- Letter that dig are: g, j, p, q, y

The following code shows the results of the `containsTallShortAndDigLetters` method.

The following code	Returns
`CoolAndWorthy.containsTallShortAndDigLetters("alfaqui");`	`true`
`CoolAndWorthy.containsTallShortAndDigLetters("factoid");`	`false`
`CoolAndWorthy.containsTallShortAndDigLetters("pigmy");`	`false`

The fifth method to complete is: `int getNumDistinctLetters(String wd)`. `getNumDistinctLetters` returns the number of distinct letters in `wd`.

The following code shows the results of the `getNumDistinctLetters` method.

The following code	Returns
`CoolAndWorthy.getNumDistinctLetters("circumlocution");`	9
`CoolAndWorthy.getNumDistinctLetters("acumen");`	6

The sixth method to complete is: `boolean isWordCool(String wd)`. `isWordCool` returns `true` if the String `wd` is *cool*. A String is *cool* if it satisfies 3 or more of the four properties:

- `noConsecutiveVowels`
- `noCommonlyUsedBigrams`
- `containsSeldomUsedLetters`
- `containsTallShortAndDigLetters`

The following code shows the results of the `isWordCool` method.

The following code	Returns
`CoolAndWorthy.isWordCool("alfaqui");`	`true`
`CoolAndWorthy.isWordCool("factoid");`	`false`

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The seventh method to complete is: `boolean isWordWorthy(String wd)`. `isWordWorthy` returns true if the String `wd` is *cool* and contains 7 or more distinct letters.

The following code shows the results of the `isWordWorthy` method.

The following code	Returns
`CoolAndWorthy.isWordWorthy("alfaqui");`	`false`
`CoolAndWorthy.isWordWorthy("buzzwigs");`	`true`
`CoolAndWorthy.isWordWorthy("conjugately");`	`true`
`CoolAndWorthy.isWordWorthy("conjuahely");`	`false`

The Eigthth method to complete is: `List<String> makeWorthy(String wd, String s)`. `makeWorthy` returns a `List<String>` of all `String`s that can be made worthy by adding the String parameter `s` to any location in the String `wd`. The list should NOT contain duplicates.

The following code shows the results of the `makeWorthy` method.

The following code	Returns
`List<String> listAns =` `  CoolAndWorthy.makeWorthy("conjuahely", "x");`	
`listAns.size();`	`2`
`listAns.contains("conjuahxely");`	`true`
`listAns.contains("conjuxahely");`	`true`

The following code shows the results of the `makeWorthy` method.

The following code	Returns
`listAns = CoolAndWorthy.makeWorthy("factoid", "sg");`	
`listAns.size();`	`1`
`listAns.contains("factosgid");`	`true`