This question involves the implementation and extension of a RandomStringChooser class.

(a) A RandomStringChooser object is constructed from an array of non-null String values. When the object is first constructed, all of the strings are considered available. The RandomStringChooser class has a getNext method, which has the following behavior. A call to getNext returns a randomly chosen string from the available strings in the object. Once a particular string has been returned from a call to getNext, it is no longer available to be returned from subsequent calls to getNext. If no strings are available to be returned, getNext returns "NONE".

The following code segment shows an example of the behavior of RandomStringChooser.

```
String[] wordArray = {"wheels", "on", "the", "bus"};
RandomStringChooser sChooser = new RandomStringChooser(wordArray);
for (int k = 0; k < 6; k++)
{
    System.out.print(sChooser.getNext() + " ");
}</pre>
```

One possible output is shown below. Because schooser has only four strings, the string "NONE" is printed twice.

bus the wheels on NONE NONE

Write the entire RandomStringChooser class. Your implementation must include an appropriate constructor and any necessary methods. Any instance variables must be private. The code segment in the example above should have the indicated behavior (that is, it must compile and produce a result like the possible output shown). Neither the constructor nor any of the methods should alter the parameter passed to the constructor, but your implementation may copy the contents of the array.