# N-Grams: Predictive Text

Quiz, 10 questions

9/10 points (90%)

## Congratulations! You passed!

Next Item

1 / 1 points

**1.** Here is the code for runMarkovZero.

```
1   public void runMarkovZero() {
2  FileResource fr = new FileResource();
3  String st = fr.asString();
4  st = st.replace('\n', ' ');
5  MarkovZero markov = new MarkovZero();
6  markov.setTraining(st);
7  for(int k=0; k < 3; k++) {
8    String text = markov.getRandomText(500);
9    printOut(text);
10   }
11   }
```

Suppose the line

```
markov.setRandom(18);
```

is put between lines 7 and 8, as the first line in the body of the for loop. Which one of the following options best describes how this line affects the program?

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1 / 1 points

**2.** In the **MarkovRunner** class in the **runMarkovZero** method, set the random seed to 1024 and run this method on the file **confucius.txt**.

What is the first line of text output when this program runs?

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1 / 1 points

**3.** In the Tester class, run the program **testGetFollowsWithFile** with the string "o" and the file **confucius.txt**.

What is the size of the ArrayList of characters that follow "o"?

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1 / 1 points

**4.** In the Tester class, run the program **testGetFollowsWithFile** with the string "he" and the file **confucius.txt**.

What is the size of the ArrayList of characters that follow "he"?

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1 / 1 points

**5.** After the completion of the **MarkovOne** class to generate random text by finding all the characters that follow one character, set the random seed in the **runMarkovOne** method in the **MarkovRunner** class to 365. Then run **runMarkovOne** on the file **romeo.txt**.

What is the first line generated?

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1 / 1 points

**6.** After the completion of the **MarkovFour** class to generate random text by finding all the characters that follow four characters, set the random seed in the **runMarkovFour** method in the **MarkovRunner** class to 715. Then run **runMarkovFour** on the file **romeo.txt**.

What is the first line of text generated?

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1 / 1 points

**7.** After the completion of the **MarkovModel** class to generate random text by finding all the characters that follow N characters, set the random seed in the **runMarkovModel** method in the **MarkovRunner** class to 953 and pass in N as 7. Then run **runMarkovModel** on the file **romeo.txt**.

What is the first line of text generated?

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0 / 1 points

**8.** For the class **EfficientMarkovModel**, which one of the following is the best place to call the **buildMap** method?

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1 / 1 points

**9.** In the **EfficientMarkovModel** class, comment out the print statements in the **printHashMapInfo** method that prints out the map. Make sure **printHashMapInfo** is called right after the HashMap is built. Then in the **MarkovRunnerWithInterface** class call the **runModel** method on an **EfficientMarkovModel** of order 6 with seed 792 on the file **confucius.txt**.

How many keys are in the HashMap?

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1 / 1 points

**10.** In the **EfficientMarkovModel** class, comment out the print statements in the **printHashMapInfo** method that prints out the map. Make sure **printHashMapInfo** is called right after the HashMap is built. Then in the **MarkovRunnerWithInterface** class call the **runModel** method on an **EfficientMarkovModel** of order 5 with seed 531 on the file **confucius.txt**.

What was the size of the largest ArrayList in the HashMap?