

AP Computer Science Java

Mr. Clausen

Program 16A

PROGRAM 16A Adlibbed MadLibs (30 points)

Write a program that asks the user to enter 3 different nouns, verbs, adverbs, and adjectives. Make your program user friendly by prompting them for these values. Use one line comments to separate this program into its parts: input, and “calculations and output” which will be merged into one section. (Parts of Speech: http://www.englishclub.com/grammar/parts-of-speech_1.htm)

- 1) Type comments at the beginning of the program to display your name and other information just like those used for program 2A. **Be sure to update the program name, program number, and program description.**
- 2) Import Scanner.
- 3) Declare the class name in the format LastNameFirstNameP16A. Don't forget that the filename needs to be the same when you save your program. This would be a good time to save your program if you haven't done so already, LastNameFirstNameP16A.java.
- 4) Declare the main method:
`public static void main(String [] args)`
- 5) Instantiate an object of the Scanner class in order to use input from the keyboard.
`Scanner reader = new Scanner(System.in);`
- 6) Declare all of the variables necessary for this program. Make sure that you use descriptive variable names to create readable, self-documenting code.
- 7) Type the following comment:
`//-----Display My Information-----`
Follow this comment with the method `Display_My_Info()` that uses print statements to display your name and period output. **Be sure to change the program name, and program number.**
- 8) Ask the user for the values of 3 nouns, verbs, adverbs, and adjectives.
- 9) Calculate a random number from 1 to 3 using `Math.random()` like we did in program 4.
- 10) For the output section, use the random number to select one of three possible stories to fit the 3 nouns, verbs, adverbs, and adjectives into. (Use “if, elif, else statements for this.)
- 11) **Use methods for each part of the program.** Start your method names with **public static** and then **void** or **int**, etc. The methods should be at the end of your program after the `}` that ends the

public static void main (String [] args) method and before the final **}** that ends your **public class LastNameFirstNameP16A** class.

12) Save your program as LastNameFirstNameP16A.cpp.

Use blank lines to separate each of the program sections listed in all of the steps above. When you are finished with your program, have tested it thoroughly to make sure that your calculations are correct, and are sure that you don't need to make any changes, then save your program in the "T" network mapping, in the Program 16 MadLibs folder.