

Great Computer Challenge

JAVA

Level IV

Problem 1: Magic Words

30 points

Write an application that uses random generation to create sentences. Use four arrays of strings called article, noun, verb and preposition. Create a sentence by selecting a word at random from each array in the following order: article, noun, verb, preposition, article and noun. As each word is picked concatenate it to the previous words in a sentence. The words should be separated by spaces. When the final sentence is output, it should start with a capital letter and end with a period. The program should generate 20 sentences and output them to the console.

The arrays are defined as follows:

Array	Values				
article	a	one	some	any	the
noun	boy	girl	dog	town	car
verb	drove	jumped	ran	walked	skipped
preposition	to	from	over	under	on

Problem 2: Shape of Things to Come

30 points

Design an applet that will allow the user to select either a circle or a square to be drawn. A scroll bar should be provided to adjust the size of the object being drawn. The following are presented as examples of the applet, although the actual design of the interface is left to the programmer.



