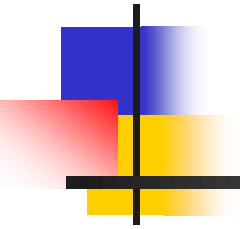


Project 3

String Methods

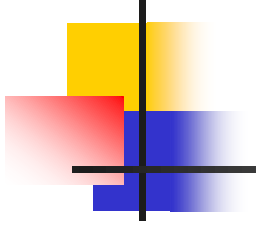
Project 3: String Methods

Write a program to do the following string manipulations:

- Prompt the user to enter a phrase and read the phrase from the keyboard into variable stringA.
- Prompt the user to enter another phrase and read this phrase from the keyboard into variable stringB.
  - You may assume that there are at least three characters in each string.
- Output the number of characters in each string to the screen.
- Concatenate the two phrases, separated by a space, and output the result to the screen.
  - StringA followed by StringB, with a space between.
  - Call this the *composite* string.

Project 3: String Methods

- Output the number of characters in the composite string to the keyboard.
  - Should be the sum of the lengths of the two original strings + 1.
- Replace each of the vowels in the composite string with an asterisk (*) and output the modified string to the screen.
  - Consider the letters A E I 0 and U (upper case and lower case) to be the only vowels.
- Determine and output the number of characters in the composite string prior to the first vowel.
  - This needs the String method indexOf.
  - See the last two slides of http://www.csee.usf.edu/~turnerr/Programming_Concepts/040c_Classes_and_Objects.pdf



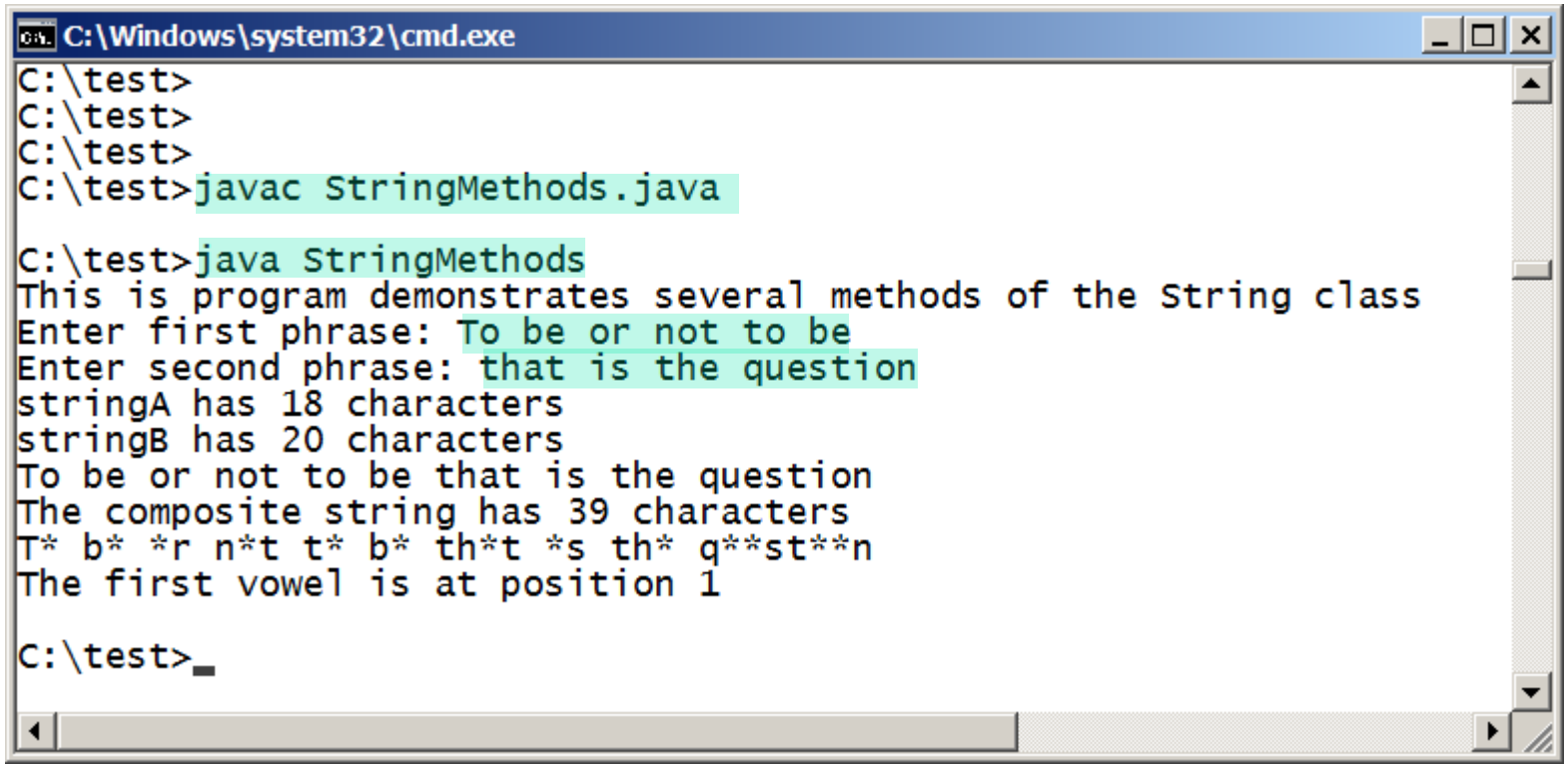
Test Data

Test your program using the following data:

- To be or not to be
- That is the question

Sample Run

- Your output should be similar in format to that shown in the sample run shown below.



Writing the Program

- Start with a stub
  - Just output the initial message.
  - Compile and test after each step.
  - Always have a working program!
- Add code to get the inputs.
  - Declare variables for the inputs.
  - Instantiate a Scanner
  - Output a promt and read the first phrase from the keyboard.
  - Output a promt and read the second phrase from the keyboard.
  - Temporarily output the strings received
    - (So that you can verify that they were read correctly.)

Writing the Program

- Determine and output the length of each string.

- Declare a variable for the composite string.
- Create and output the composite string.
- Output the number of characters in the composite string.

- Replace each of the vowels in the composite string with an asterisk (*) and output the modified string to the screen.

- Determine and output the number of characters in the composite string prior to the first vowel.

Writing the Program

- At this point your program is complete.

- If your program compiles without errors and produces the expected output, go back and delete (or comment out) the temporary outputs.

Submission

- Put your Java source file into a folder and zip it.
- Submit your zipped Java source file via Canvas Assignments.

- Project is due by 11:59 PM
  - Sunday, January 31 Sections 001 and 002
  - Monday, February 1 Sections 003 and 004

Ground Rules

- Do not share your code with other students
- Before or after submitting the project.
  - OK to *discuss* the project.
- Do not copy any other student's code.
  - Or even look at it.
- Do not let anyone copy or examine your code.

Ground Rules

Except for code posted on the class web site

- Do not copy code from the Internet
  - or any other source.
- Do not ask for help on an Internet forum.
- Write your own code.