

CSCI 1301 – Lab #5

Exercise

The goal of this exercise is to familiarize you with String variables and the use of some of the methods of the class String.

Write a java program that contains a class called *PlayingWithStrings* with a *main* method that performs the following actions:

- a. Write a declaration of a String variable called *bestSwimmer* and initialize it “MICHAEL F. WHELPS”.
- b. Write an assignment statement to replace W in the string *bestSwimmer* with a capital P using the appropriate String method.
- c. Write a declaration for a String variable called *firstName* and initialize it to the substring containing the first 7 characters of the String *bestSwimmer* (use a string method to obtain the substring).
- d. Write a declaration for a String variable called *lastName* and use the appropriate String method to initialize *lastName* to the string containing the last 6 characters of the String *bestSwimmer*.
- e. Write a declaration of a String variable called *middleInitial* and initialize it to the substring of characters in *bestSwimmer* with indexes between 8 and 9 using the appropriate String method.
- f. Write several assignments statements to convert the characters in the string variables *firstName* and *lastName* to lowercase.
- g. Use the appropriate String method to replace the first letter of the *firstName* and *lastName* by its corresponding capital letter.
- h. Write a declaration of a String variable called *reversedName* and initialize it to the concatenation of *lastName*, *firstName* and *middleInitial* so the name is in the following format: Last Name, First Name MiddleInitial.
- i. Display the following short biography inserting the variables *reversedName*, *firstName*, *middleInitial* and *lastName* in the appropriate locations:

reversedName –, June 30, 1985, Baltimore, Maryland.

firstName middleInitial lastName is an American swimmer. *lastName* has won 14 career Olympic gold medals, the most by any Olympian. *lastName* went a perfect 8-for-8 in Beijing, breaking Mark Spitz's single-Games record for gold medals. As of September 2008, *firstName lastName* holds seven world records in swimming.

After you have completed this exercise, demonstrate it to your lab instructor.

WebCT Submission

After you have completed both exercises in this lab, upload the file **PlayingWithStrings.java** in WebCT and submit it to receive credit.