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# CS 121 Lab 13

10/28/2014

## Task 1—Compare String objects

Read the following code. The purpose is to test if str2 is qual to str3.

public class StringEqual

{

public static void main(String[] args)

{

String str1 = "abcd";

String str2 = "abcdefg";

String str3 = str1 + "efg";

System.out.println("str2 = " + str2);

System.out.println("str3 = " + str3);

if (str2 == str3)

System.out.println("The strings are equal");

else

System.out.println("The strings are not equal");

}

}

1. If you did not get the expected output, find the logic error and fix it. Hint is can you compare two strings by equality operator == ? Why? No because the == operater just compares data other than strings. We use the equals method found in the string class to compare two strings.
2. Further modify the code to generate output about which string is bigger. If str2 comes before str3 in dictionary order, print “Str2 is less than str3”; if they are same, print “Same”; otherwise, print “Str2 is bigger than str3”. Use a scanner object to let user initialize str2 and str3.

## Task 2—Smallest numbers

Consider the code below that prompts the user to input values for x and for y. It then prints the smallest value contained in the variables x and y.

import java.util.Scanner;

public class SmallestInt

{

public static void main(String[] args)

{

Scanner scan = new Scanner(System.in);

System.out.println("Enter a value for x:");

int x = scan.nextInt();

System.out.println("Enter a value for y:");

int y = scan.nextInt();

if (x <= y)

System.out.println("The smallest value was " + x);

else

System.out.println("The smallest value was " + y);

}

}

Modify the code above so that

1. It prints the larger value of x and y
2. It prompts the user to enter a third value for a variable z. Rewrite the logic so that the program prints out the largest value contained in x, y, and z.

Hint: Solve the problem using a nested if/else structure.