ICS 102 Problem Set 02 – Strings and Output formatting

1. Write the output of each statement in the program fragments below. If a statement causes an error, mention the error:
2. String str = "Shout \"Come here!\"\nvery loudly";

System.out.println(str);

System.out.println(str.length());

System.out.println(str.substring(6, 18));

System.out.println(str.substring(0, str.indexOf(' ')).length());

System.out.println(str.charAt(6) > str.charAt(17));

System.out.println(str.substring(str.lastIndexOf(' ') + 1));

System.out.println(Character.isDigit('F'));

System.out.println(str.charAt(str.length() + 1));

1. What is the output if the input is: **5.7**

import java.util.Scanner;

public class Test{

public static void main(String[] args){

Scanner scanner = new Scanner(System.in);

System.out.println("Enter an integer: ");

int num = scanner.nextInt();

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

}

}

1. String str1 = "test";

String str2 = "test";

String str3 = new String("test");

System.out.println(str1 **==** str3);

System.out.println(str1.equals(str3));

System.out.println(str1 **==** str2);

System.out.println("This string is long".compareTo("apple"));

str3 = str2;

System.out.println(str1 **==** str3);

1. What is the output if the input is:

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**ICS 102**

import java.util.Scanner;

public class Test{

public static void main(String[] args){

Scanner scanner = new Scanner(System.in);

System.out.println("Enter an integer: ");

int num = scanner.nextInt();

System.out.println("Enter an string: ");

String str = scanner.nextLine();

System.out.println("num = " + num + "," + str);

}

}

1. System.out.printf("x = %7.2f ,y = %5d ,m = %,d%n", 26.5267,72,12865);

System.out.printf("%-10s%n", "COE");

System.out.printf("%10s%n", "COE");

System.out.printf("%+d, %d%n", 65, 43);

System.out.printf("%f", 123);

1. Given the following declarations:

**double x = 7.3446;**

**int y = -68;**

what printf statement will produce the following output? (a square represents one space)



1. Given the following declarations:

**int x = 16; double y = -7.1446;**

what printf statement will produce the following output? (A square represents one space)



1. What is the output of the following Java program fragment? (Use a square to represent one space)

**int x = 10; double y = 10.3752;**

**System.out.printf(**"**x=%4d\*%6.2f=%.2f%n**"**, x, y, x \* y);**

1. What is the output of the following Java program fragment?

**double x = 5.95;**

**System.out.printf("%.0f",x);**

1. Write a Java program that prompts for and reads a string. It then erases the first word “the” from that string if it exists. It finally prints the new string.
2. Write a Java program that prompts for and reads a string. It then displays the string after changing every uppercase vowel letter (A, E, I, O, and U. upper and lower case) to a dot '.'.
3. Write a Java program that prompts for and reads an integer value between 0 and 999 inclusive. It then computes and displays the sum of the first and last digits of the number.