

**Computer Science or Information Technology**

Instructor: **Dawei Li, Ph.D.**

Day, Month, Year

Day

CSIT 501

Department of CSIT

Assessment

Module-2

Hidalgo, Rafael

Exercise 2.1

What is the difference between the literals 4, 4.0, '4', and "4"?

4 is an Integer literal

4.0 is a float literal

‘4’ is a char literal

“4” is a string literal

Exercise 2.2

Explain the following programming statement in terms of objects and the services they provide:

System.out.println("I gotta be me!");

System.out is an object, which has a method called println which takes a string “I gotta be me!” and displays it on the monitor.

Exercise 2.3

What output is produced by the following code fragment? Explain

System.out.println("Welcome!");

System.out.print("This is an art of printing in ");

System.out.println("Java programming.");

System.out.print("More ");

System.out.print("to ");

System.out.println("follow.");

Output:

Welcome!

This is an art of printing in Java programming.

More to follow.

What is important to note is that (println) will give a new line after the string in parenthesis is printed in the monitor. Any whitespace within strings will also be preserved when it is printed in the monitor.

Exercise 2.4

Is the following program statement wrong? If so, how can it be fixed?

System.out.println("The solution is here.\n");

This program statement will output successfully in the console.

Exercise 2.5

What output is produced by the following statement? Explain.

System.out.println("50 plus 25 is " + 50 + 25);

The output will be 50 plus 25 is 5025. The reason this happens is because when a string is concatenated with an integer, the integer becomes a string itself.

Exercise 2.6

What is the output produced by the following statement? Explain.

System.out.println("He thrusts his fists\n\tagainst" + "the post\nand still insists\n\the sees the \"ghost\"");

Output:

He thrusts his fists

againstthe post

and still insists

he sees the "ghost"

\n begins a new line

\t is equivalent to tab

\” allows for quotation marks to be printed

Exercise 2.9

What value is contained in the integer variable sum after the following statements are executed?

sum = 15;

sum = sum % 3;

sum += 500;

sum \*= 2;

Sum will equal to 1000

Exercise 2.11

Given the following declarations, what result is stored in each of the listed assignment statements?

int iResult, num1 = 25, num2 = 40, num3 = 17, num4 = 5;

double fResult, val1 = 17.0, val2 = 12.78;

a. iResult = num1 / num4; this equals 5

b. fResult = num1 / num4; this equals 5.0

c. iResult = num3 / num4; this equals 3

d. fResult = num3 / num4; this equals 3.0

e. fResult = val1 / num4; this equals 3.4

f. fResult = val1 / val2; this equals 1.330203443

g. iResult = num1 / num2; this equals 0

h. fResult = (double) num1 / num2; this equals 0.625

i. fResult = num1 / (double) num2; this equals 0.625

j. fResult = (double) (num1 / num2); this equals 0.0

k. iResult = (int) (val1 / num4); this equals 3

l. fResult = (int) (val1 / num4); this equals 3.0

m. fResult = (int) ((double) num1 / num2); this equals 0.0

n. iResult = num3 % num4; this equals 2

o. iResult = num2 % num3; this equals 6

p. iResult = num3 % num2; this equals 17

q. iResult = num2 % num4; this equals 0

Exercise 2.12

For each of the following expressions, indicate the order in which the operators will be evaluated by writing a number beneath each operator.

a. a – b – c – d (1,2,3)

b. a – b + c – d (1,2,3)

c. a + b / c / d (3,1,2)

d. a + b / c \* d (3,1,2)

e. a / b \* c \* d (1,2,3)

f. a % b / c \* d (1,2,3)

g. a % b % c % d(1,2,3)

Exercise 2.16

assuming you have a Graphics object called page, write a statement that will draw a line from point (20, 30) to point (50, 60).

page.drawLine(20, 30, 50, 60);