Pencil And Paper Assignment For Lesson 2

1. Consider the following if…then logic:

if(age > 65) socialSecurityStatus = "eligible"; else socialSecurityStatus = "ineligible";

Rewrite this (pseudo) code using the Java ternary operator.

1. Suppose a String s is initialized by

String s = "a friendly face";

* 1. Compute the value of the expression

s.charAt(2);

* 1. What is the value of

s.length()?

* 1. What is the value of

s.substring(2,9)? s.substring(4)?

1. Write a Java expression that computes each of the following:
   1. Given the radius r of a circle, compute the area of the circle, and store it in a variable A.
   2. Given the length len and width wid of a rectangle, compute the length of the diagonal of the rectangle, and store it in a variable diag.
2. Compute the following (without writing any Java code) and indicate the type of your answer. (Example: 4 \* 3 + 2 equals 14, of type int.)
   1. 3 \* 5 / 9 % 2
   2. 4 ^ 3 & 5
   3. 13 >> 2 << 2 ^ 4
   4. 32 | 16/3 >> 2 & 5.
3. You are reviewing some old Java programs in your company's IT department and you read the following assignment statement in some abandoned code:

int a = (b = 5);

Is the statement legal (i.e. would it compile)? If so, what value is assigned to the variable a? Explain.