HW Fundamentals 8/28

ref end of chapter 02

Multiple choice and TF

1. Every complete Java statement ends with a _____.
   A. period
   B. parenthesis
   C. semicolon
   D. ending brace

3. A group of statements, such as the contents of a class or a method, are enclosed in _____.
   A. braces { }
   B. parentheses ( )
   C. brackets [ ]
   D. any of these will do

5. Which of the following are not valid println statements? (Indicate all that apply)
   A. System.out.println + “Hello World” ;
   B. System.out.println(“have a nice day”);
   C. out.System.println(value);
   D. println.out(Programming is great fun);

7. This keyword is used to declare a named constant.
   A. constant
   B. namedConstant
   C. final
   D. concrete

9. These characters mark the beginning of a single-line comment.
   A. //
   B. /*
   C. */
   D. /**

Predict the Output

1.
```
int freeze = 32, boil = 212;
freeze = 0;
boil = 100;
System.out.println( freeze + “\n” + boil + “\n” );
```

3.
```
System.out.print( “I am the incredible” );
System.out.print( “computing\nmachine” );
System.out.print( “\nand I will\namaze\n” );
```

System.out.print(“you.”);

5. int a, x=24;
   a = x % 2;
   System.out.println(x + “\n” + a);

Algorithm Workbench

1. Show how the double variables temp, weight, and age can be declared in one statement.

3. Write assignment statements that perform th following operations with the variables a, b, and c.

   a. Adds 2 to a and store the results in b
   b. Multiplies b times 4 and stores the result in a
   c. Divide a by 3.14 and stores the result in b
   d. Subtracts 8 from b and stores the result in a
   e. Stores the character ‘K’ in c
   f. Stores the Unicode code for ‘B’ in c

5. How would each of the following numbers be represented in E notation?

a. 3.287×10^{6}

b. -9.7865×10^{12}

c. 7.65491×10^{-3}

7. What will the following code output?

```
int apples = 0, bananas = 2, pears = 10;
apples += 10;
bananas *= 10;
pears /= 10;
System.out.println(apples + " " +
                   bananas + " " +
                   pears);
```

9. What will the following code output?

String message = “Have a great day!”;
System.out.println(message.charAt(5));

11. Convert the following pseudocode to Java code. Be sure to declare the appropriate variables.
Store 20 in the speed variable.
Store 10 in the time variable.
Multiply speed by time and store the result in the distance variable.
Display the contents of the distance variable.

13. Write the code to set up all the necessary objects for reading keyboard input. Then write code that asks the user to enter his or her desired annual income. Store the input in a double variable.

Program Challenge (note screen is 400 by 400)