Syntax Worksheet

**Comments**

Comments are ways to write directions to let you the programmer and other coders to understand exactly what you are trying to do. They are important because it’s a way to communicate in an English way exactly what you are trying to accomplish. You can write anything in these comments. There are two ways of making comments. If you are doing one line, you can just type two forward slashes. Example:

// this is a comment

If you want to make comments that span over multiple lines, you can use /\* … \*/. Example:

/\* this is a comment that

goes over two lines \*/

1. Write a comment stating you are making a list of grades (either one line or two):

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Semi-colons**

After each line of code, you need to add a semi-colon to let the compiler know that you are done with that line. Without it, a red X will show up in eclipse and a red line will underline the last character on the line of code. This does not apply to a few things, one of them being declarations of Classes and methods (this means any line that ends with a bracket). What line numbers need a semi-colon at the end?

1. /\*\*

2. \* **@author** jbrotsos

3. \*

4. \*/

**5. public** **class** HelloWorld {

6.

7. /\*\*

8. \* **@param** args

9. \*/

10. **public** **static** **void** main(String[] args) {

11. // print hello world

12.

13. System.***out***.println ("Hello world")

14.

15. /\*

16. \* System.out.println ("Hello")

17. \* System.out.println ("World")

18. \*/

19. }

20. }

**Types**

Data types are names for a category which are used to represent data values. Here is a list of data types:

**int** : short for “integer” (a number value, including negative numbers)

**double** : a “fractional” number

**char** : short for “character” (a single letter)

**boolean** : a logical value of either true or false

Here is an example of using the above data types:

int x = 23;

double y = 2.3;

char z = ‘g’;

boolean isNumber = false;

1. Create four variables like above with different names:
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Keywords**

There are certain words reserved for the Java language so the programmer can communicate with the compiler on what you are trying to do. These keywords can’t be used as variables in your code. Some keywords:

for new package boolean do if private this

break void implements protected else short double import

case int extends public char final interface static

class const float super while

There are many, many more not listed but these are the most common. Circle the statements below that are invalid.

1. int x;
2. int x = 4;
3. int x = double;
4. double int;
5. System.out.println (“int”);
6. System.out.println (int);