**Activity 8**

**Defining terms in your own words, define the following terms:**

1. Class

**A class is used for creating objects. It describes the contents of the objects that belong to it and range of values. There can be multiple classes in one program and can be used in other classes as well.**

2. Object

**An element or components which consist of properties and methods to make used of the given data types.**

3. Instantiate

**To call a constructor of class to create instance or object of the class, allocates memory and returns reference.**

4. Instance Variable

**A declared variable in a class outside the constructors and methods. It can be created when the object is instantiates.**

5. Instance Method

**A method of the class**

6. Class Variables or static member variables

**Any variable with static modifier.**

7. Constructor

**Used to initialized object when the object to be initialize is created.**

Java Scavenger Hunt!

1. Look for a method that checks if a certain String ends with a certain suffix. For example, if the given string is "Hello", the method should return true the suffix given is "lo", and false if the given suffix is "alp".

Class: String

Method Declaration: public boolean endsWith(String suffix)

Sample Usage:

String word = "Hello";  
System.*out*.println(word.endsWith("hel"));  
System.*out*.println(word.endsWith("lo"));

Output:

False

True

2. Look for the method that determines the character representation for a specific digit in the specified radix. For example, if the input digit is 15, and the radix is 16, the method would return the character F, since F is the hexadecimal representation for the number 15 (base 10).

Class: Character

Method Declaration: public static char forDigit(int digit, int radix)

Sample Usage:

char value = Character.*forDigit*(15, 16);  
System.*out*.println(value);

Output:

f

3. Look for the method that terminates the currently running Java Virtual Machine

Class: System

Method Declaration: public static void exit(int status)

Sample Usage:

System.*exit*(0);

Output:

(Process finished with exit code 0)

4. Look for the method that gets the floor of a double value. For example, if I input a 3.13, the method should return the value 3.

Class: Math

Method Declaration: public static floor(double num)

Sample Usage:

double num = 3.13;  
System.*out*.println((int)Math.*floor*(a));

Output:

3

5. Look for the method that determines if a certain character is a digit. For example, if I input '3', it returns the value true.

Class: Character

Method Declaration:

public static boolean isDigit(char ch)

Sample Usage:

char input1= '3’, input2 = 'J';

System.*out*.println(input1 + " is a digit = " + Character.*isDigit*(input1));  
System.*out*.println(input1 + " is a digit = " + Character.*isDigit*(input2));

Output:

3 is a digit -> true

J is a digit -> false