

## ACTIVITY – STARTER CODE ANALYSIS SOLUTIONS

Predict what each of the following short programs will output to screen. The goal of the activity is to refresh your memory in regard to various concepts.

	<b>PROGRAM</b>	<b>ANSWERS</b>
A)	<pre>int x = 5; int y = 2; double z = 4.0; System.out.println(x / y * z);</pre>	8.0
B)	<pre>int x = 5; int y = 2; double z = 1.0; System.out.println(x / (y * z));</pre>	2.5
C)	<pre>String s = "Patrick Campeau" s = s.substring(0, 1).toLowerCase(); System.out.println(s);</pre>	p
D)	<pre>String s = "Lockerby" s = s.substring(3); System.out.println(s);</pre>	kerby
E)	<pre>String s1 = "Summer" String s2 = s1.toUpperCase(); System.out.println(s1);</pre>	Summer
F)	<pre>String s1 = "Grad" String s2 = s1.substring(s1.length()-1); System.out.println(s2.toUpperCase());</pre>	D
G)	<pre>boolean a = false; boolean b = true; System.out.println(a &amp;&amp; b);</pre>	false
H)	<pre>boolean a = false; boolean b = true; System.out.println(a    b);</pre>	true
I)	<pre>boolean a = false; boolean b = true; System.out.println(!a &amp;&amp; b);</pre>	true
J)	<pre>int x = 35; x--; System.out.println(x);</pre>	34
K)	<pre>int a = 10; a += 5; System.out.println(a);</pre>	15
L)	<pre>int num = 21; System.out.println(num % 2);</pre>	1
M)	<pre>int num = 37; System.out.println(num % 8);</pre>	5
N)	<pre>for (int i = 0; i &lt;= 5; i++)     System.out.print(i + " ");</pre>	0,1,2,3,4,5,

O)	<pre>for (int i=10; i&lt;=15; i=i+3)     System.out.print(i + ",");</pre>	10,13,
P)	<pre>System.out.println((int)5.0/2);</pre>	2
Q)	<pre>for(int coco = 1; coco &lt;= 3; coco++)     System.out.print("HA");     System.out.print("HI");</pre>	HAHAHAHI (indenting error)
R)	<pre>String[] colours = {"blue", "purple", "red", "green"}; System.out.println(colours[2]);</pre>	red
S)	<pre>int[] arr = {2, 5, 4, 1, 3}; arr[1] = arr[2] + arr[3]; System.out.println(2 * arr[1]);</pre>	10
T)	<pre>int[] arr = {2, 6, 5, 4, 1, 7, 8, 3}; for (int x : arr)     if (x % 2 == 0)         System.out.print(x + " ");</pre>	2 6 4 8
U)	<pre>int a = 10; if (a &lt;= 100)     System.out.println("A"); else if (a &lt;= 50)     System.out.println("B");</pre>	A
V)	<pre>int a = 10; if (a &lt;= 100)     System.out.println("A"); if (a &lt;= 50)     System.out.println("B");</pre>	A B
W)	<pre>String alpha = "abcdefghijklmnopqrstuvwxyz"; int i = alpha.indexOf("b"); System.out.println(i);</pre>	1
X)	<pre>String letters = "abcdef"; int i = letters.indexOf("z"); System.out.println(i);</pre>	-1
Y)	<pre>int[] nums = {4, 2, 1, 3}; int prod = 1; for (int i=0; i&lt;nums.length; i++)     prod *= nums[i]; System.out.println(prod);</pre>	24
Z)	<pre>int[] numbers = new int[5]; for (int i=0; i&lt;numbers.length; i++)     numbers[i] = i * 4; System.out.println(Arrays.toString(numbers));</pre>	[0, 4, 8, 12, 16]