\_\_\_\_\_ 1. Consider the two program segments below.

Segment1 Segment2

**int list[ ]; int list[ ] = new int[100];**

**list = new int[100];**

Which of the following is a true statement about the comparison of Segment1 and Segment2?

(A) Segment1 declares **list** correctly. Segment2 declares **list** incorrectly.

(B) Segment1 declares **list** incorrectly. Segment2 declares **list** correctly.

(C) Both Segment1 and Segment2 declare **list** correctly.

(D) Both Segment1 and Segment2 declare **list** incorrectly.

\_\_\_\_\_ 2. What is the output of the codebelow?

**int list[ ] = {1,2,3,4,5};**

**for (int k = list.length-1; k > = 0; k--)**

**System.out.println("list[" + k + "] = " + list[k]);**

(A) list[4] = 5

list[3] = 4

list[2] = 3

list[1] = 2

list[0] = 1

(B) list[5] = 5

list[4] = 4

list[3] = 3

list[2] = 2

list[1] = 1

(C) list[5] = 4

list[4] = 3

list[3] = 2

list[2] = 1

list[1] = 0

(D) list[4] = 1

list[3] = 2

list[2] = 3

list[1] = 4

(E) Compile Error

\_\_\_\_\_ 3. Which of the following statement displays the **list** elements correctly?

**int list[ ] = {11,22,33,44,55,66,77,88,99};**

(A) for (int k=0; list item; k++)

System.out.print(item + " ");

(B) for (int item: list)

System.out.print(item + " ");

(C) for (int k=0; int item; k++)

System.out.print(item + " ");

(D) for (int k=0; list item; k++)

System.out.print(item[k] + " ");

4. *Declare* an array object called reals that will hold double values.   
   
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1. Now *instantiate* reals so that it will hold 15 double values.   
     
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2. *Assign* to the first location in reals the value of 5.9.   
     
    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. *Assign* to the last location in reals the value of 23.8.   
     
   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Now declare *and* instantiate an array object called nums that will hold 50 int values.   
     
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5. Draw a picture of the array created by the following line of code.

String[] answers = new String [4];

1. Write the code to fill each element in the array above with the word “Apple”.
2. Write the code to print each element of the answers array using System.out.

Assume the following:

int[] a = {25, -3, 6, 0, -3, 6};

int[] b = new int[100];

int[] c;

For all questions write the answer, or write "illegal" if the code is an illegal statement. (In other words, if it would produce a runtime exception: NullPointerException or ArrayIndexOutOfBoundsException).

1. \_\_\_\_\_\_\_\_\_\_\_\_\_ Value of **a.length** ?
2. \_\_\_\_\_\_\_\_\_\_\_\_\_ Value of **b.length** ?
3. \_\_\_\_\_\_\_\_\_\_\_\_\_ Value of **c.length** ?
4. \_\_\_\_\_\_\_\_\_\_\_\_\_ Value of **a[1]** ?
5. \_\_\_\_\_\_\_\_\_\_\_\_\_ Value of **a[6]** ?
6. \_\_\_\_\_\_\_\_\_\_\_\_\_ Value of **c[0]** ?
7. \_\_\_\_\_\_\_\_\_\_\_\_\_ How many array objects were created by the declarations above?

Assume the following:

int[] a = {2, 8, -3, 0, 5, 14, -4, 9};

int[] b = new int[50];

int[] c = null;

1. Consider the following code:

int n = 0;

for (int i=0; i<a.length; i++)

{

if (a[i] % 2 == 0)

{

n++;

}

}

What is the final value of n? \_\_\_\_\_\_\_\_\_\_\_\_\_

1. Consider the following code:

for (int i=0; i<a.length; i++)

{

b[i] = a[i] \* 2;

}

n = b[4];

What is the value of n now? \_\_\_\_\_\_\_\_\_\_\_\_\_

1. Given the following declaration:

double [] banana = {12.2, -7.3, 14.2, 11.3};

write the code to find the average of all the values in the array.

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

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

System.out.println(“The average is: ” + average);

1. Assume that scores is an array of double's with a size of 100. Write a code segment that uses a for loop to display (output using System.out) the elements that are greater than 20.

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1. Write the code that traverses the integer array named nums and counts the number of negative numbers.

int negativeNums = 0;

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{

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

}

}

System.out.println(“The number of negative numbers: ” +  
 negativeNums);

1. Complete the following method that counts the number of even numbers in a given array of integers.

public static int numEvens(int[] array)

{

}

\_\_\_\_ 25. What is the output of program **Quiz04\_1.java** below?

public class Quiz04\_1

{

public static void main(String args[ ])

{

int list[ ];

list = new int[10];

for (int k = 0; k < 10; k++)

System.out.print(list[k] + " ");

System.out.println();

}

}

(A) 0 1 2 3 4 5 6 7 8 9

(B) 1 2 3 4 5 6 7 8 9 10

(C) 0 0 0 0 0 0 0 0 0

(D) 0 0 0 0 0 0 0 0 0 0

\_\_\_\_\_26. What is the output of program **Quiz04\_2.java** below?

public class Quiz04\_2

{

public static void main(String args[ ])

{

int list[ ] = {1,2,3,4,5};

int[] counters = new int[2];

for (int k = 0; k < list.length; k++)

if(list[k] % 2 == 0)

counters[0] = counters[0] + 1;

else

counters[1] = counters[1] + 1;

System.out.println(counters[0] + “ “ + counters[1]);

}

}

|  |  |
| --- | --- |
| (A) 3 2 | (C) 2 3 |
| (B) 1 0  0 1  2 1  2 2  3 2 | (D) 2 3  2 3  2 3  2 3  2 3 |

(E) Compile Error