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| Instructor |  | Due Date |  |

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| Part | **1** | **2** | **3** | **4** | Total |
| *Maximum Points* | **25** points | **25** points | **25** points | **25** points | **100**G101010 pointsG |
| ***Your Score*** |  |  |  |  |  |

**Textbook Reading Assignment**

Thoroughly read Chapter(s) 7 in your Java 5.0 textbook.

**Part 1 Glossary Terms**

Define, in detail, each of these glossary terms from the realm of computer programming logic and design and computer topics, in general. If applicable, use examples to support your definitions. Consult your notes or course textbook(s) as references or the Internet by visiting Web sites such as:

[**http://www.askjeeves.com**](http://www.askjeeves.com) or [**http://www.webopedia.com**](http://www.webopedia.com/)

**(a) Array**

|  |
| --- |
|  |

**(b) Element ( of an array )**

|  |
| --- |
|  |

**(c) Index**

|  |
| --- |
|  |

**(d) Subscripted Variable**

|  |
| --- |
|  |

**(e) Zero - Indexed Array**

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| --- |
|  |

**Part 2 Textbook Exercises - Arrays**

Select the correct answer.

**(1)** The indexes of an array always start with position number 0 . (a) True (b) False

**(2)** The last index of an array equals the length of the array less 1 . (a) True (b) False

**(3)** Given the following code, what will total be equal to?

int[ ] abc = { 1, 2, 3, 4, 0 };

int total = 1;

for (int i = 2 ; i < abc.length; i++)

total = total + abc[i];

(a) 5 (b) 35 (c) 7 (d) 10 (e) 8

**(4)** What is the range of valid indices for the following? int[ ] array = new int[10];

(a) 0 - 10 (b) 1 - 10

(c) To infinity and beyond infinity (d) None of these

**(5)** What is the range of valid indices for the following?

float[ ] arrayTwo = new float[101];

(a) 0 - 100 (b) 1 - 101

(c) To infinity and beyond infinity (d) None of these

**(6)** The indexes of an array always start with 0 and end with the integer that is

(a) one less than the size of the array.

(b) one greater than the size of the array.

(c) the actual size of the array.

(d) twice the size of the actual array.

(e) none of the above

**(7)** What is the output of the following code?

double[ ] a = {1, 2, 3};

System.out.println(a[2] + " " + a[1] + " " + a[0]);

(a) 1 2 3 (b) 3 2 1 (c) 1 3 2 (d) 2 1 3 (e) 3 1 2

**(8)** What is the output of the following code?

double[ ] a = {3, 2, 1};

System.out.println(a[1] + " " + a[0] + " " + a[2]);

(a) 1 2 3 (b) 3 2 1 (c) 1 3 2 (d) 2 3 1 (e) 2 1 3

**(9)** How many array elements are there given this declaration? int[ ] b = new int[3];

(a) 1 (b) 0 (c) 4 (d) 2 (e) 3

**(10)** When referring to an array element, the position number inside the bracket is called the

(a) index or subscript. (b) element.

(c) cell. (d) superscript

**Part 3 Topics in Computer Programming - Arrays**

Fill in the blanks to complete the following program segment that takes in 4 different integer values and then will output the integers in reverse order.

Assume keyboard is the input object.

final int SIZE = 4;

int[ ] originalArray = new int[SIZE];

int[ ] \_\_\_\_\_\_\_\_\_\_\_\_\_ = new int[SIZE];

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

System.out.println("enter an integer: ");

originalArray[i] = Integer.parseInt(keyboard.readLine());

}

int index = SIZE - \_\_\_\_\_\_\_\_\_\_ ;

for(int i = 0; i < reverseArray. \_\_\_\_\_\_\_\_\_\_ ; i++) {

reverseArray[i] = originalArray[ \_\_\_\_\_\_\_\_\_\_ ];

System.out.println(reverseArray[i]);

\_\_\_\_\_\_\_\_\_\_ - -;

}

**Part 4 Topics in Computer Programming - Arrays**

Write a complete program that declares an array of any five integers, from 0 to 100 , and averages only those integers which are greater than 70 .