### 10 MCQ questions.

1) Which one of the following options is a valid line of code for displaying the 19 element of myarray?

```
a) System.out.println(myarray[19]);
b) System.out.println(myarray(19));
c) System.out.println(myarray(18));
d) System.out.println(myarray[18]);
```

Answer: d

2) Identify the correct statement for defining an integer array named numarray of ten elements.

```
a)int[] numarray = new int[9];
b) int[] numarray = new int[10];
c) int[10] numarray;
d) int numarray[10];
```

Answer: **b** 

3) What is the output of the following code snippet?

```
int[] myarray = { 10, 20, 30, 40, 50 };
System.out.print(myarray[2]);
System.out.print(myarray[3]);

a) 1050
b) 2030
c) 3040
d) 4050
```

Answer: c

**4)** What is the valid range of index values for an array of size 10?

```
a) 0 to 10b) 1 to 9
```

c) 1 to 10

d) 0 to 9

Answer: d

5) what is the output of the given code snippet?

```
int[] mynum = new int[5];
for (int i = 1; i < 5; i++)
{
   mynum[i] = i + 1;</pre>
```

```
System.out.print(mynum[i]);
a) 2345
b) 1234
c) 1345
d) 1111
```

#### Answer: a

**6)** Suppose you wish to write a method that returns the sum of the elements in the partially filled array myArray. Which is a reasonable method header?

```
a) public static int sum(int[] values)
b) public static int sum()
c) public static int sum(int[] values, int currSize)
d) public static int sum(int[] values, int size, int currSize)
```

#### Answer: C

7) Which one of the following statements is a valid initialization of an array named somearray of ten elements?

```
a) int[] somearray = { 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 };
b) int somearray[] = { 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 };
c) int[10] somearray = { 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 };
d) int somearray[10] = { 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 };
```

#### Answer: a

**8)** When an array myArray is only partially filled, how can the programmer keep track of the current number of elements?

```
a) access myArray.length()
```

- b) maintain a companion variable that stores the current number of elements
- c) access myArray.currentElements()
- d) access myArray.length() 1

#### Answer: b

9) In a partially filled array, the number of slots in the array that are not currently used is

- a) the length of the array minus the number of elements currently in the array
- b) the number of elements currently in the array minus the length of the array
- c) the length of the array plus the number of elements currently in the array
- d) the number of elements currently in the array

### Answer: a

10) Complete the following code snippet with the correct enhanced for loop so it iterates over the array without using an index variable.

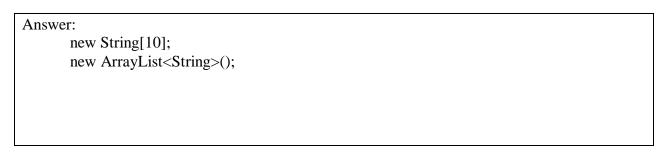
Answer: a

### • 10 True/False questions.

N°	Questions	Answer	
11	Questions		False
1	Array length = maximum number of elements in array	$\sqrt{}$	
2	For each primitive type there is a <b>wrapper class</b> for storing values of that type.	V	
3	Double is one of the eight primitive types. double is a class type.		$\sqrt{}$
4	To remove an element at an index, use the remove method: names.remove(1);	1	
5	Ordered array $\Rightarrow$ Move all elements following the element to be removed to a upper index		1
6	The process of checking all elements until you have found a match is called a <b>linear search</b>	$\sqrt{}$	
7	To set an element to a new value, use the set method: names.set(2, "Carolyn");	V	
8	ArrayList class manages a sequence of objects	√	
9	In the arrays, Index starts at 1		√
10	Arrays have fixed length	√	

 4 short	answer	questions	5.

1	) How do you cons	struct an array of 10	strings? An arra	y list of strings?
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## 2) What is the difference between arrays and ArrayList?

Answer:

Array: Sequence of values of the same type.

ArrayList: class manages a sequence of objects.

3) Why would a programmer use a partially filled array of numbers instead of an array list?

Answer:

You need to use wrapper objects in an ArrayList<Double>, which is less efficient.

4) What is the difference between ordered array and unordered array?

Answer:

Ordered array: Move all elements following the element to be removed to a lower index

Unordered array: Overwrite the element to be removed with the last element of the array

### One question to find/fix errors in the sample code.

Consider the following code snippet. What is the errors?

```
double sum = 1;
for (int i = 1; i < accounts.size(); i--)
{
    BankAccount account = accounts.get(i);
    sum = sum + account.setBalance();
}</pre>
```

```
Answer:

double sum = 0;

for (int i = 0; i < accounts.size(); i++)

{

BankAccount account = accounts.get(i);

sum = sum + account.getBalance();
```

One questions to print the output for the given code.

What is the output of the following code snippet?

```
public class Arraytotal {
    public static void main(String[] args) {
        int[]values={10,20,30,40};
        double total = 0;
        for (double element : values)
        {
            total = total + element;
        }
        System.out.println(total) ;
    }
}
```

```
Answer: 100
```

One simple programming question.

Write a java program to create an array to store the value of the counter i\*i and I start with value 0

Answer:

```
public class Array1 {
    public static void main(String[] args) {
        double[] values = new double[10];
        for (int i = 0; i < values.length; i++)
        { values[i] = i * i;
            System.out.println("the value of i= "+i+" , array values[i]="+ values[i]);
        }
    }
}</pre>
```