

Please read 8.1–8.4 of the textbook and then answer the following, trying not to look at your notes or at the textbook. Quiz #6, on Thursday 26th April, will consist of questions taken or inspired from the Part I of this homework and from the lab.

## Part I — Questions

1. Write a statement that creates a 10-elements `int` array named `numbers`.
2. In the following, what is the value of the size declarator? What is the value of the index?

```
int[] numbers;  
numbers = new int[8];  
numbers[4] = 9;
```

3. What is wrong with the following array declaration?

```
int[] books = new int[-1];
```

4. Draw the content of the `scores` array once those statements have been executed.

```
int[] scores = new int[3];  
scores[0] = 13;  
scores[2] = 25;
```

5. What will be displayed at the screen by the following code?

```
int[] values = new int[6];  
for (int i = 0 ; i < 6 ; i++)  
    values[i] = (i*2);  
  
foreach (int j in values)  
    Console.WriteLine(j);
```

6. Suppose we are given an `int` array `dailyPushUp` with 7 elements. Write a piece of code that display the value of the elements stored in the array `dailyPushUp`.
7. What is “array bounds checking”? When does it happen?
8. Is there an error with the following code? If you think there is one, explain it, otherwise draw the content of the `myIncomes` array once those statements have been executed.

```
double[] myIncomes = new double[5];  
myIncomes[1] = 3.5;  
// No income on day two.  
myIncomes[3] = 5.8;  
myIncomes[4] = 0.5;  
myIncomes[5] = 1.5;
```

9. What would be the size of the test array after the following statement has been executed?

```
int[] test = {3, 5, 7, 0, 9};
```

10. Write a statement that creates and initializes a double array with the values 12.5, 89.0 and 3.24.

11. What is the value of count and the content of number once the following has been executed?

```
int count=2;
int[] number={3, 5, 7};
number[count--] = 8;
number[count]--;
```

12. Suppose we have an array named temp that has been declared and initialized. How can we know the number of elements in this array?

13. Describe what the following code would do.

```
int[] record = { 3, 8, 11 };
int accumulator = 0;
foreach (int i in record)
    accumulator += i;
```

14. Assuming we have two int arrays of the same size, firstA and secondA, write a statement that copy the content of firstA into secondA.

15. Write a method (header included) that takes as argument an int array, and display at the screen the value of each element of that array.

16. Write a method (header included) that takes as argument an int array, and stores the value 10 in each element of that array.

