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?

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

3. What is wrong with the following array declaration?

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

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

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

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

   ```java
   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.

   ```java
   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?

```java
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?

```java
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.

```java
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.