

C# / Unity Code Katas

Level 1

Do these on paper or board / white-board, with pencil / pen. Do not use a computer, and do not refer to any online references (while attempting the questions). The goal is to internalize this knowledge to the point where it is automatic. Repeat a level until you get it perfect. After that you move on to the next level.

The goal is to give you the skills to move beyond cobbling together sample code towards intentionally designing new code and analyzing existing code. Also, in a typical programming interview you will need to be able to code on paper or on a board, with no autocomplete.

1) Declare an integer variable and initialize it to the value 7, all in one line.

2) Declare a float variable and initialize it to the value 3.5, all in one line.

3) Declare a string variable, and initialize it to "abc", all in one line.

4) Suppose you've been given an already constructed array of 10 integers, called "numbers". How do you set the first element of the array to 5?

5) Suppose you've been given an already constructed array of 10 integers, called "numbers". How do you set the last element of the array to 6?

6) Declare an array of integers, called "aInts".

7) Construct (allocate) an array of integers, called "aInts", with 20 elements.

8) What property of a C# array returns the number of items in the array?

/// References

Types (C# Programming Guide), MSDN

<https://msdn.microsoft.com/en-us/library/ms173104.aspx>

Arrays Tutorial (C#), MSDN

[https://msdn.microsoft.com/en-us/library/aa288453\(v=vs.71\).aspx](https://msdn.microsoft.com/en-us/library/aa288453(v=vs.71).aspx)

Arrays (C# Programming Guide), MSDN

<https://msdn.microsoft.com/en-us/library/9b9dty7d.aspx>

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