

C# / Unity Code Katas

Level 2

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.

Note 1

For all questions, assume that a function “print” has been supplied that you can use to print out numbers:

```
void print(int x); // print(3) prints out 3.
```

1) Write a **for** loop that will print out the numbers 0 to 9 inclusive, in increasing order.

2) Write a **for** loop that will print out the numbers 1 to 10 inclusive, in increasing order.

Note 2

For the following questions, assume that an integer variable named “count” has been defined and initialized to some non-negative value. For example:

```
int count = 542; // but not necessarily 542.
```

3) Write a **for** loop that prints out the numbers from 0 to count-1 inclusive, in increasing order.

4) Write a **while** loop that prints out the numbers from 0 to count-1 inclusive, in increasing order.

5) Suppose you've been given an array of integers, called "aInts". It's already initialized and has 0 or more elements. Write a **for** loop to print out each element of aInts.

6) Suppose you've been given an array of integers, called "aInts". It's already initialized and has 0 or more elements. Write a **for** loop to add each element in aInts to sum so that after the loop exits sum contains the arithmetic sum of all the elements. For example if aInts contained {1, 3, 4, 6}, then sum should be $1 + 3 + 4 + 6 = 14$, after the loop.

/// End