

Thank you for taking the time to complete this assessment.

We hope this will allow us to better understand your individual skillset, and whether we feel you would be a good fit for the position we are recruiting for.

Question 1/1: The following program shifts the characters A to Z by 5 places, please suggest general improvements that could be made.

Note: *There are no syntax errors in this code, and so improvements could be in the areas of performance, maintainability, and usability.*

```
using System;

namespace Encryption.CaesarCipher
{
    public class Program
    {
        public static void Main(string[] args)
        {
            int shift = 5;
            string output = "";

            Console.Write("Input: ");
            string input = Console.ReadLine();
            if (input != null)
            {
                for (int i = 0; i < input.Length; i++)
                {
                    if (input[i] < 65 || input[i] > 90)
                    {
                        throw new Exception("Only A-Z supported.");
                    }

                    int shifted = input[i] + shift;
                    if (shifted > 90)
                    {
                        shifted = 65 + shifted - 91;
                    }

                    output = output + (char)shifted;
                }
            }

            Console.WriteLine("Output: " + output);
        }
    }
}
```