**C# interview questions:**

* What are the main 4 principles of c#?
* What are the differences between interface and Abstract?
* What is composition in c#?
* What are the different types of class in c#?
* What are the different types of access modifiers in c#?
* What is recursive method in c#?
* What is private setter?
* What is a generic class in c#?
* What is DI(one example is autofac in testing world, just have a look, you don’t have to learn everything as junior but have to know) in c#?
* What is the different between String and string in c#?

**Coding questions:(using console app)**

* Write a basic construction of c# to output “hello world” to the console.
* Display all the prime number in c# and output it to console.
* Reverse a string “abcdef” in c#(you can’t use any function written in c#).
* Check if a string is a palindrome.
* Given an int array [2,15,3,5,6,6,1,10], find the smallest number(you can’t use any function written in c#).

**Create a console application and take the input from console, make sure you do all the validation for the input. The console first asks which shape we want to calculate and then it will ask the inputs, make the app endless unless we type “exit”(case insensitive).**

1. Create a basic function to calculate the dimensions of a rectangle, and display on the console.
2. Create a basic function to calculate the dimensions of a triangle, and display on the console.
3. Create a basic function to calculate the dimensions of a circle, and display on the console.
4. Use inheritance in c# to improve the project(You can think of override, interface or abstract maybe?).
5. Make use of “Models” in c#.
6. Make use of auto setter.
7. Make use of constructor and base.

**Create a testing project under this application using NUnit to test each method.**

1. Create a test method to test the rectangle/circle/triangle.
2. Create a method to calculate the trapezoid.
3. Create a test method to test the function