1. Why do we use Async and Await in C#?
2. Using LINQ, reverse a string
3. Given a date string ("dd-mm-yyyy") add 20 days to it and print it in yyyy-mm-dd format along with its day (Monday, Tuesday, ...)
4. Write the necessary function here

void test() {

int a = 10;

int b = 20;

// call a function here

Console.Write($"a = {a} and b = {b} and c = {c}");

// which should print a = 20 and b = 10 and c = 200

// c is the product of a and b

}

1. What can you do to make the following work

void func() {

string s = "some string";

if (s.isPalindrome()) {

Console.Write($"{s} is a palindrome")

}

}

1. Build a user profile management application in .Net and send us the entire project. Make sure to add comments and to-dos cross your application to identify assumptions and highlight future recommended changes. The requirements for this simple “commandline” application is to allos the customer to:
   * Register a new user given their username, password, and email address
   * Verify a login using username and password

Please use unit tests to verify your critical functions with well documented test vectors. Send us the steps to compile and build this application. The target environment is Linux.