coding test.

**Test 1)**

**.Net Developer Coding exercise**

**Front-end**

Use any UI framework (react, angular, knockout, view or just javascript/jquery etc) for this.

Create a form with the following fields

·        First Name

·        Last Name

·        City

·        Phone Number

On click of Submit Button, It should show a table field right below with Four columns as listed above.

The table field should be sorted ascending by Last name.

Every new record entered in the above form should get populated automatically after clicking on Submit button

Form

F.Name            L.Name

City                  Phone Number

submit\_button

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F.Name     L.Name          City          Phone Number

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user1

user2

user3

------------------------------------------------------

**Back-end**

Domain :

Create API for CRUD operation --Web API Core/MVC Core

                                                Entity Framework(Code First Approach)

                                                C#

Write a unit test case for CRUD operation with Mock/nunit

Ans : I have used the .net core for crud application (Web API) and for frontend I have used the reactjs. An attached the code of both project with the mail.

Pick one of the two from below (use any SQL product for this)

**Test 2)**

**Database**

(a)

Write a SQL query for the above exercise, where it will show me how many people are from Bangalore, Mysore, Hyderabad, Vijayawada.

Count of people from these cities

And then show only those cities which have more than 300 people in the contact list.

Ans:

SELECT COUNT(\*)as "Count of People", City FROM Users GROUP BY City HAVING COUNT(\*)>300;

There are 5 students in grade 8 studying 5 subjects each (eng, telugu, science, math, social)

They have written their final year exam.

We need to store their marks.

What kind of table is needed to store the marks. Use the RDBMS principles and write the table structure. And show how the data will be stored for all 5 students for all the 5 subjects they write the exam for.

Ans:

We have three tables one for storing the data of student details

Second table for storing the subjects and its id.

Third table to store the marks with subject id

Below tables are required.

So there is a foreign ke relation between student table and subject table with marks table.

Student - Stid, Stname, Details

Subject - Subid, Subname

Marks - Stid, Subid, mark

Write a query to show all students who scored more than 60% in overall total marks

There is a possibility of adding one more subject or removing one subject by the state govt. You need to factor in this possibility as well while designing the table.

Ans

I Have used the inner queries for this problem its working fine.

select Stname from Student where id in (select table1.Stid from (select count(Subid) as totsub,SUM(marks) as totmarks, Stid from marks

group by Stid ) as table1 where totmarks/totsub>60);