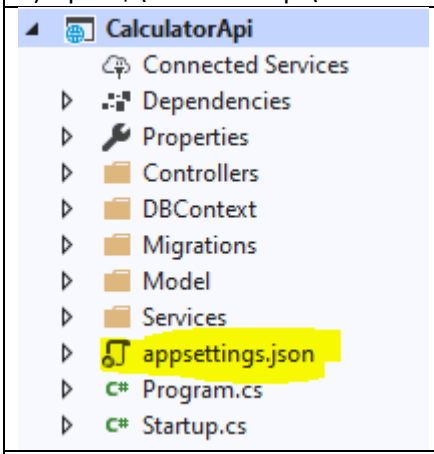
How to run API locally

1) Open $\CalculatorApi**CalculatorApi.sln** project. (Restore nuget package manager if needed)



2) Open appsettings.json
Update connection string (if needed)

```
"ConnectionString": {
   "HardeepCalculator": "Server=.;Database=hardeep_calculator;Trusted_Connection=True;"
 }
```

3) Open Package Manager Console
Tools--> Nuget Package Manager --> Package Manager console

Run following command

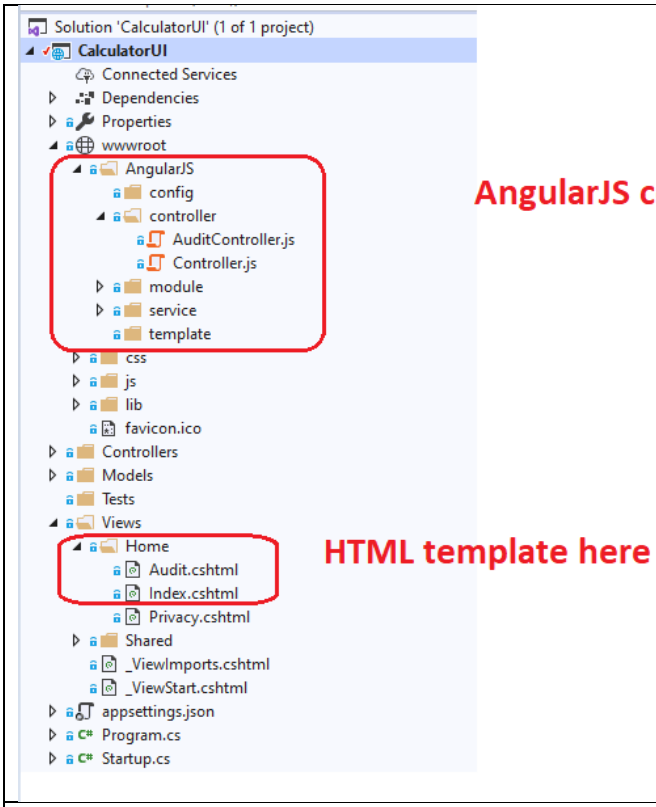
Update-database

4) Press Ctrl+F5 to start the API.

Swagger page shall show api definition

How to run UI Locally

1) Open $\CalculatorUI\CalculatorUI.sln



If API from previous step is running on port **56873** then no change needed in UI project

If port URL or port is different then update the port in following file:
$\CalculatorUI\wwwroot\AngularJS\service\Service.js
var baseUrl = "http://localhost:56873/";

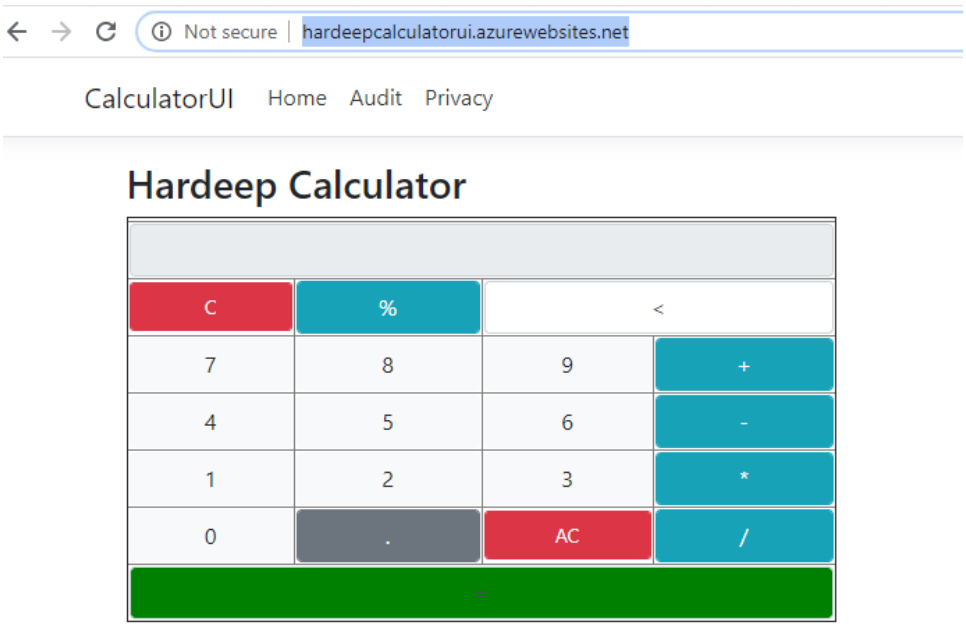
2) Run the UI from visual studio

Test Deployment

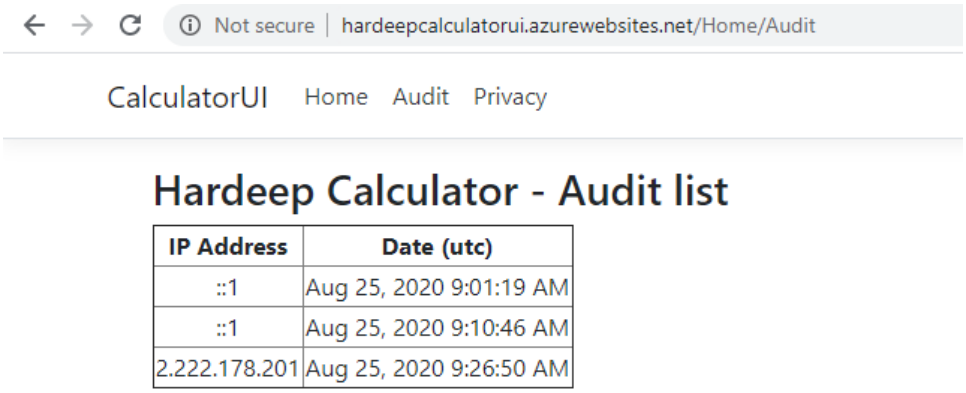
System has been deployed Cloud (Azure) for testing.

http://hardeepcalculatorui.azurewebsites.net/

http://hardeepcalculatorapi.azurewebsites.net/swagger/index.html



And DB entries can be viewed as below:



Further Changes

Further changes can be added to enhance the project

1) Add Unit tests coverage to UI project with Jasmine/Karma etc.

2) Add Acceptance tests (UI)

3) Add Integration tests to API

4) I chose to use AngularJS with MVC as it helps to use power of MVC. AngularJS can be used with NPM as well for greater benefits.