CS5551 – Advanced Software Engineering

Dr. Yugyung Lee

Assignment# 8

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Task: Develop a Mobile application using Ionic Framework and write atleast three Unit test cases using Jasmine.

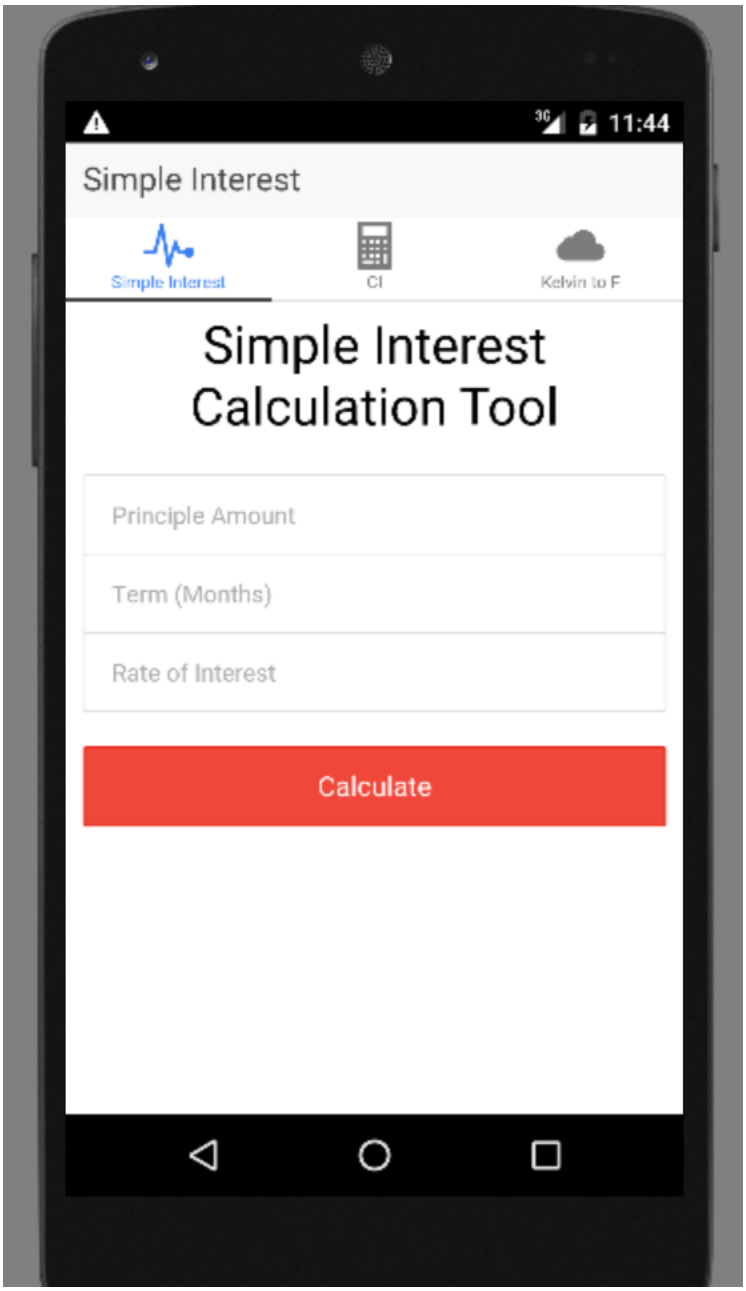
Steps:

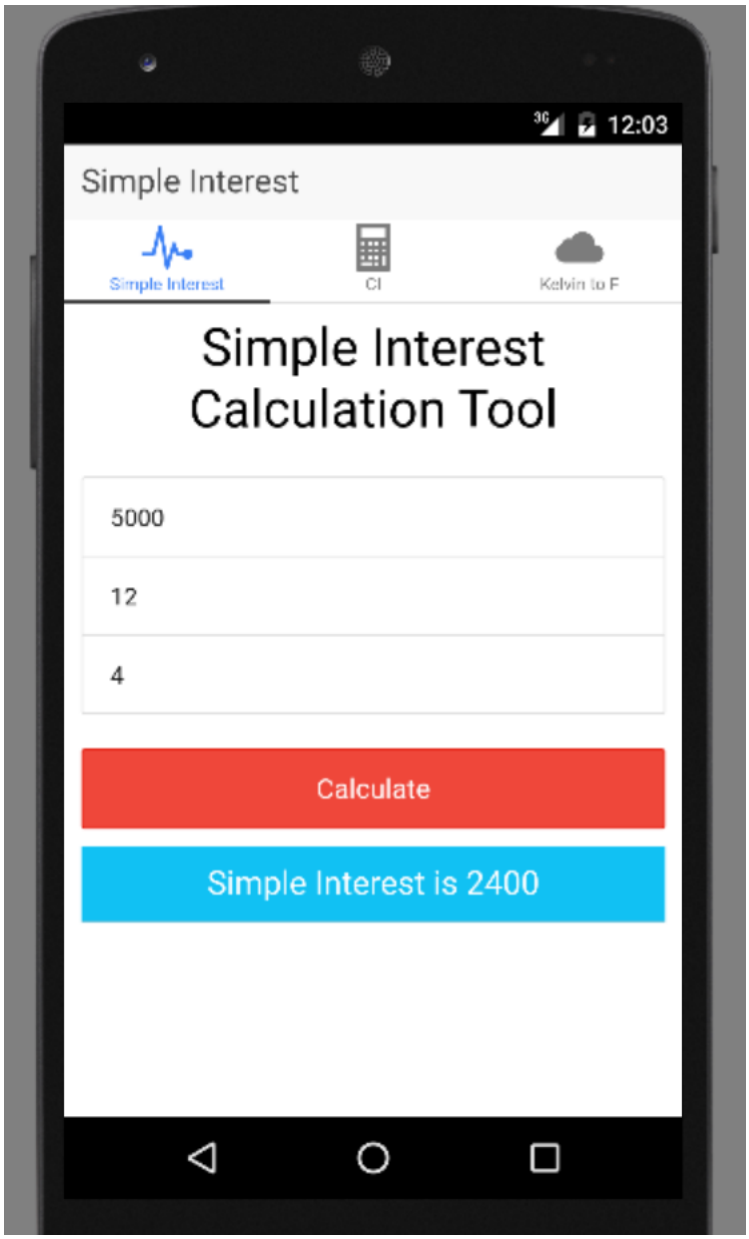
1. All the prerequisites like Nodejs, Ionic, Android Studio are installed.
2. An Ionic app is initiated using the command: ionic start ConversionApp tabs.
3. Existing Lab Assignment 6 RESTful services are modified a bit, so that they respond back by sending JSON data not XML.
4. $http is used to make calls to the services developed in Java. IP Address of the Computer is used, instead of localhost as using IP Address can give us the flexibility to run the application on a virtual device also.
5. Test cases for Simple Interest, Compound Interest, Kelvin to Fahrenheit, Kelvin to Celcius are written and executed using Karma.

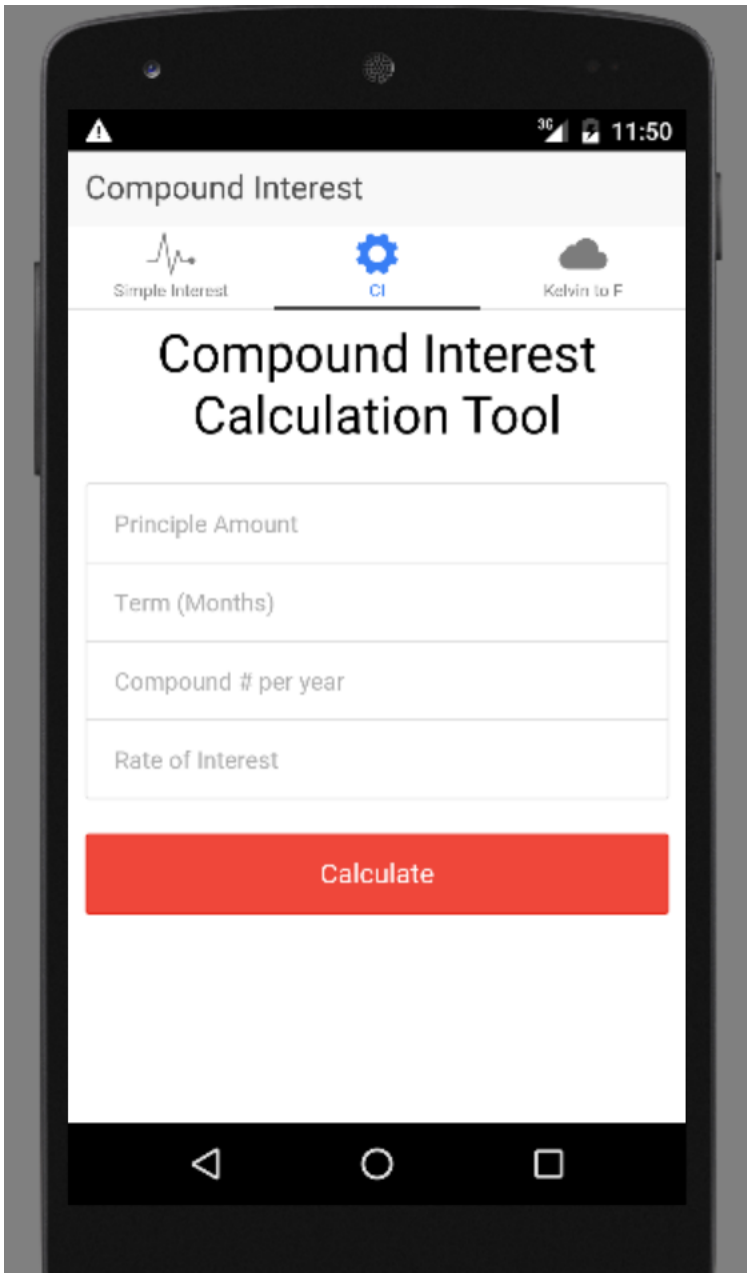
Screenshots

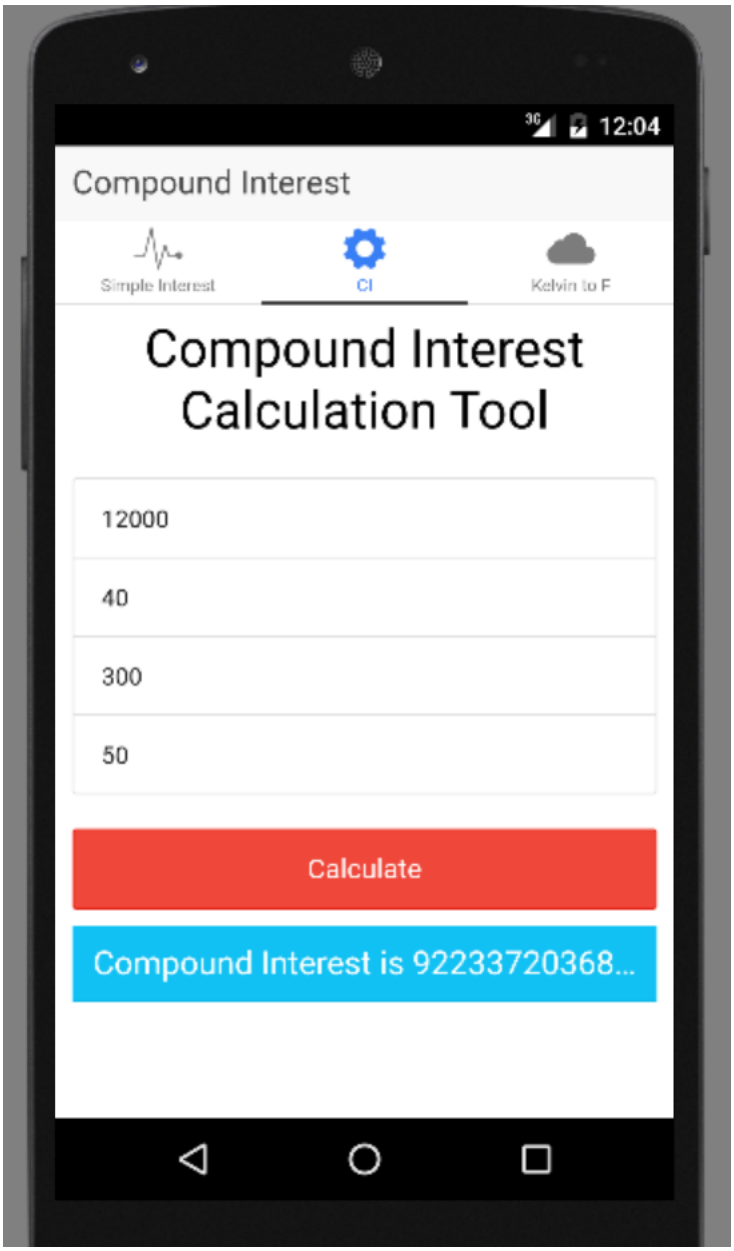
Test Cases

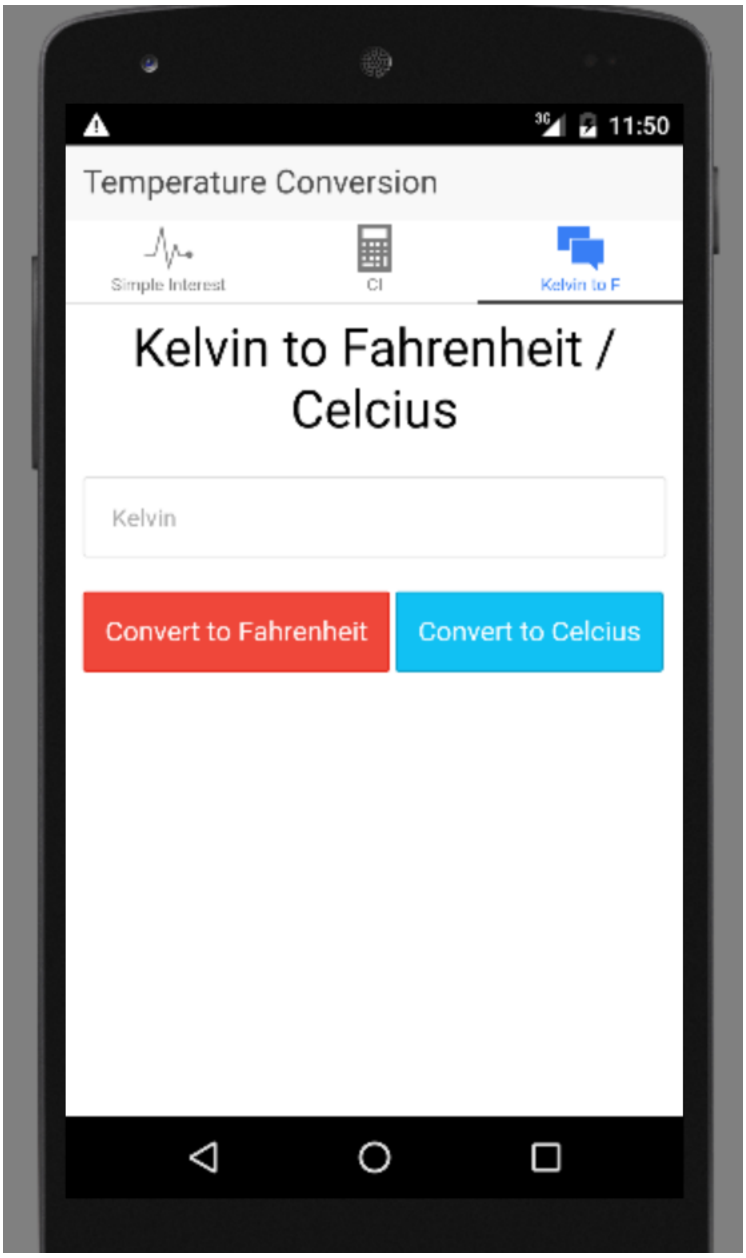
```
C:\Users\pragn\Desktop\ConversionApp>karma start karma.conf.js
16 03 2016 23:05:51.639:WARN [watcher]: Pattern "C:/Users/pragn/Desktop/ConversionApp/www/lib/platform/platform.js" does not match any file.
16 03 2016 23:05:51.645:WARN [watcher]: Pattern "C:/Users/pragn/Desktop/ConversionApp/js/*.js" does not match any file.
16 03 2016 23:05:51.682:WARN [karma]: No captured browser, open http://localhost:9876/
16 03 2016 23:05:51.692:INFO [karma]: Karma v0.13.22 server started at http://localhost:9876/
16 03 2016 23:05:51.700:INFO [launcher]: Starting browser Chrome
16 03 2016 23:05:53.002:INFO [Chrome 49.0.2623 (Windows 10 0.0.0)]: Connected on socket /#IsykWyrApaqAkipEAAAA with id 61874703
Chrome 49.0.2623 (Windows 10 0.0.0) AccountCtrl Checks Compound Interst Calculation FAILED
        Expected 2.251875390625e+36 to equal 8032.
            at Object.<anonymous> (C:/Users/pragn/Desktop/ConversionApp/www/tests/ci-test.js:15:49)
Chrome 49.0.2623 (Windows 10 0.0.0) ChatsCtrl Checks Kelvin to Celcius Conversion FAILED
        Expected 26.850000000000023 to equal 26.85.
            at Object.<anonymous> (C:/Users/pragn/Desktop/ConversionApp/www/tests/ktoc.js:12:40)
Chrome 49.0.2623 (Windows 10 0.0.0): Executed 4 of 4 (2 FAILED) (0.099 secs / 0.036 secs)
```

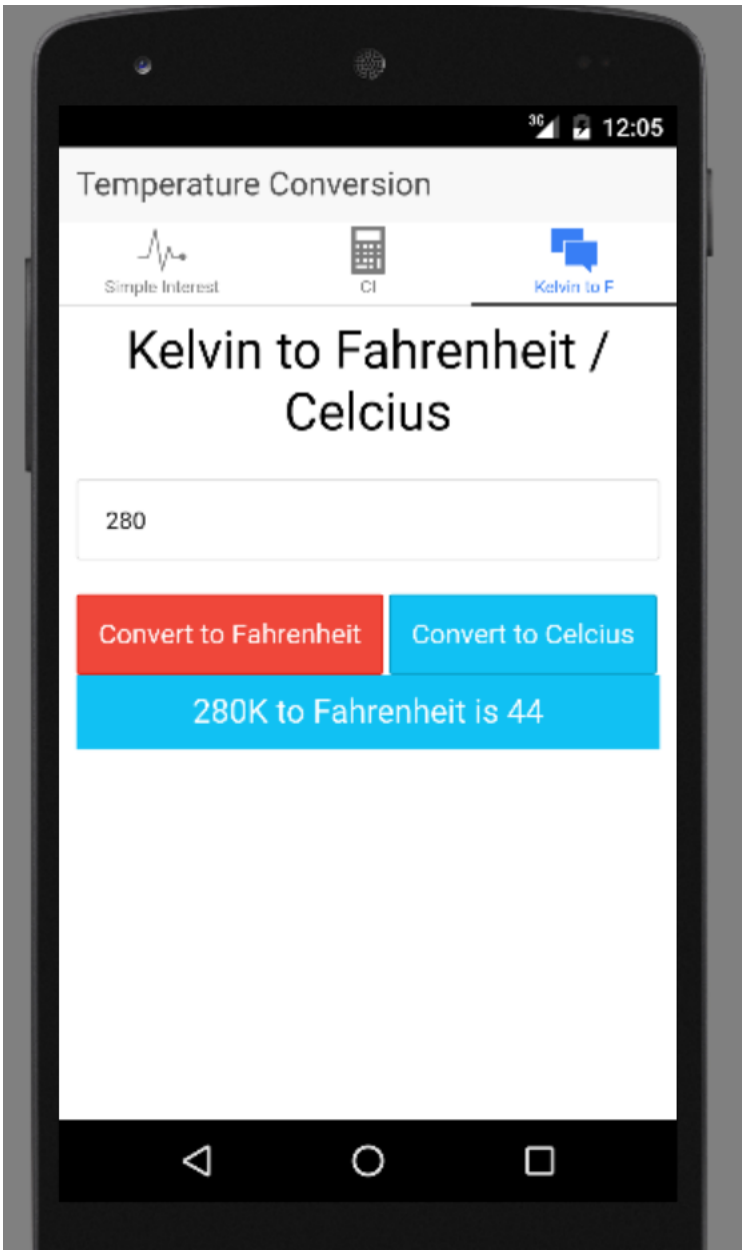

11:44
Simple Interest
Simple Interest
CI
Kelvin to F
Simple Interest Calculation Tool
Principle Amount
Term (Months)
Rate of Interest
Calculate

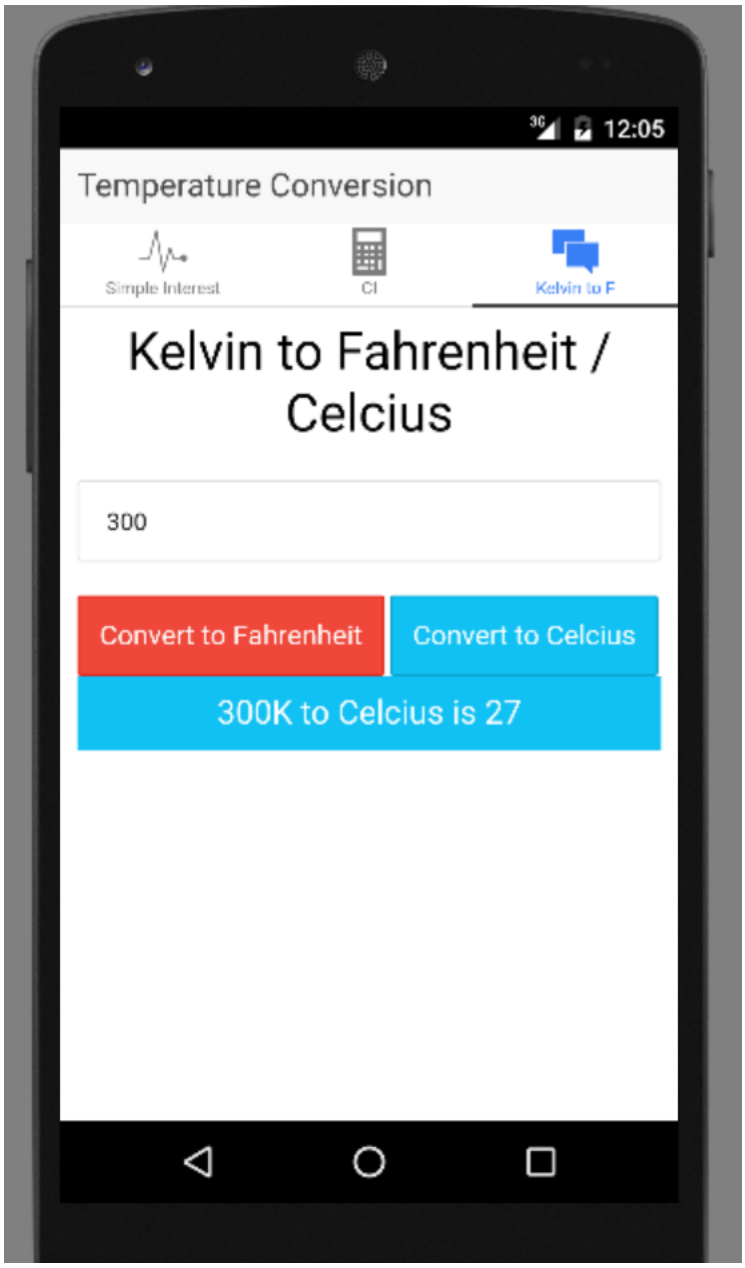

12:03
Simple Interest
Simple Interest
CI
Kelvin to F
Simple Interest Calculation Tool
5000
12
4
Calculate
Simple Interest is 2400


11:50
Compound Interest
Simple Interest
CI
Kelvin to F
Compound Interest Calculation Tool
Principle Amount
Term (Months)
Compound # per year
Rate of Interest
Calculate

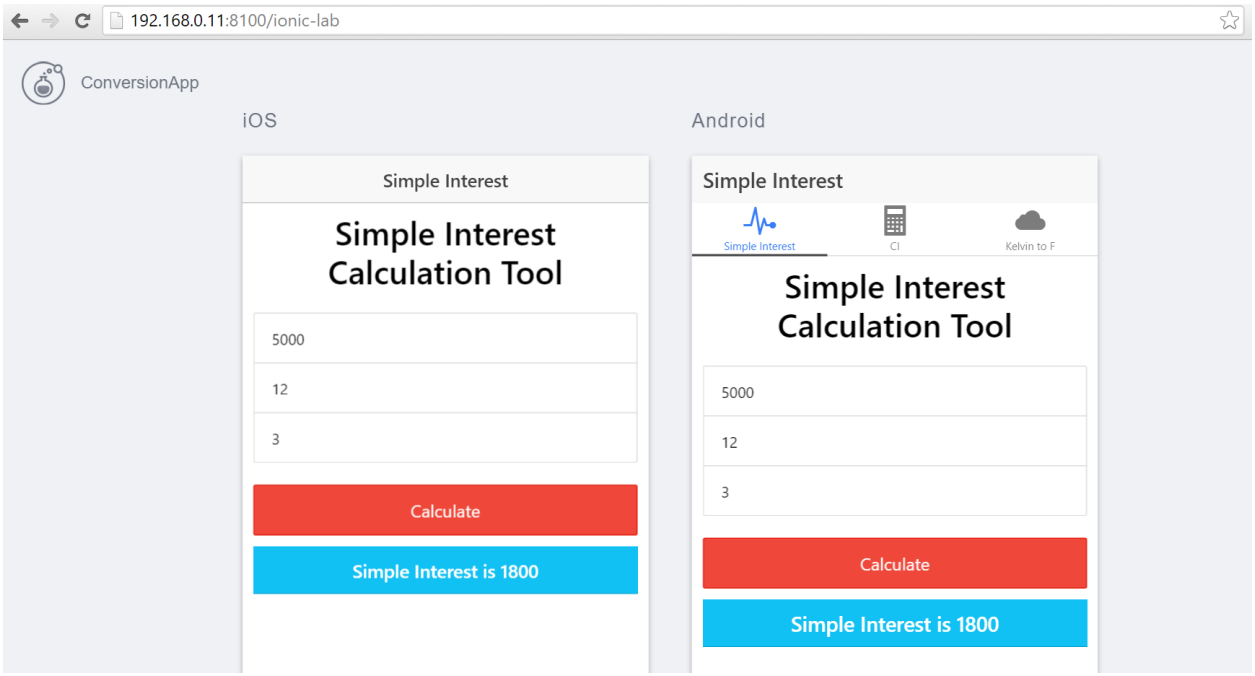

12:04
Compound Interest
Simple Interest
CI
Kelvin to F
Compound Interest Calculation Tool
12000
40
300
50
Calculate
Compound Interest is 92233720368...


11:50
Temperature Conversion
Simple Interest
CI
Kelvin to F
Kelvin to Fahrenheit / Celcius
Kelvin
Convert to Fahrenheit
Convert to Celcius

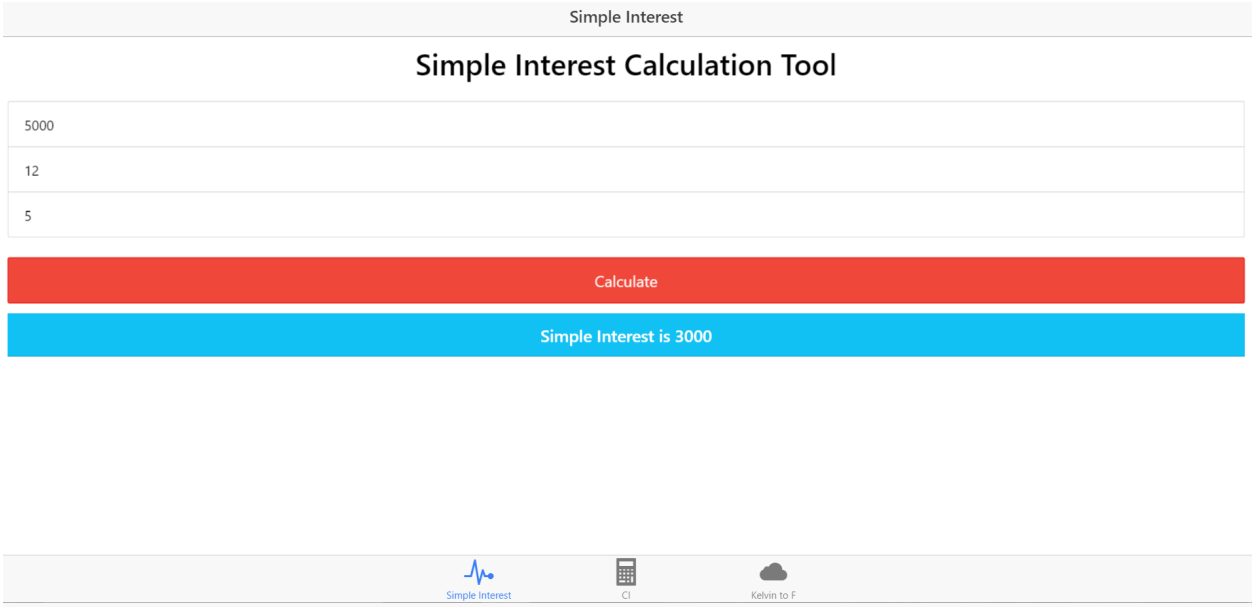

12:05
Temperature Conversion
Simple Interest
CI
Kelvin to F
Kelvin to Fahrenheit / Celcius
280
Convert to Fahrenheit
Convert to Celcius
280K to Fahrenheit is 44

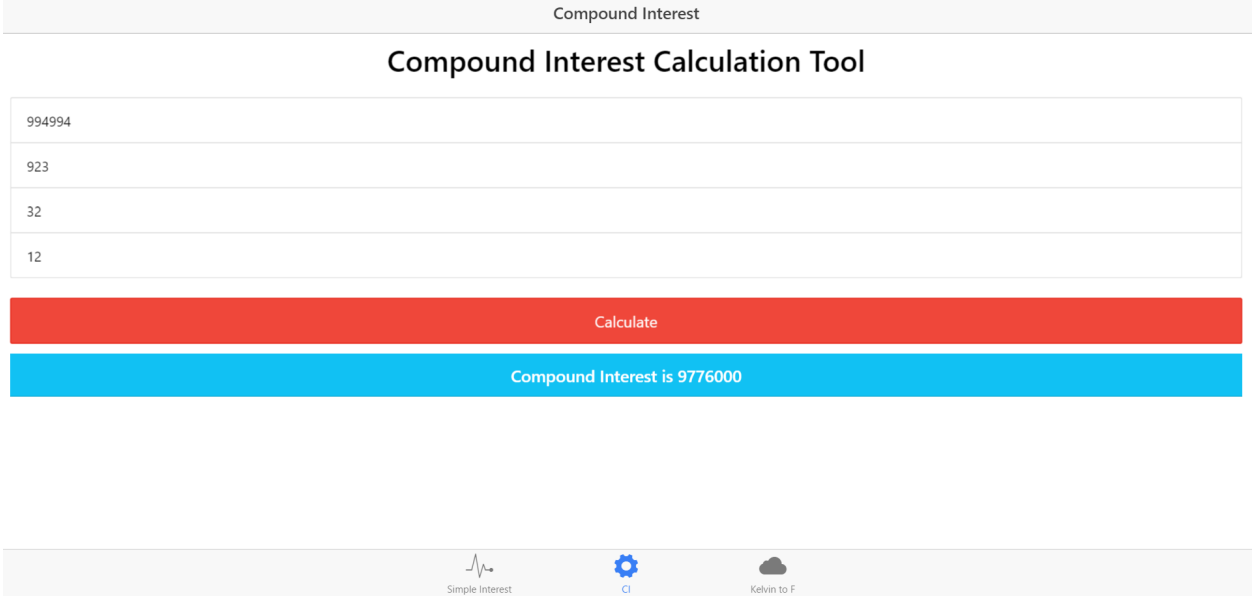

12:05
Temperature Conversion
Simple Interest
CI
Kelvin to F
Kelvin to Fahrenheit / Celcius
300
Convert to Fahrenheit
Convert to Celcius
300K to Celcius is 27

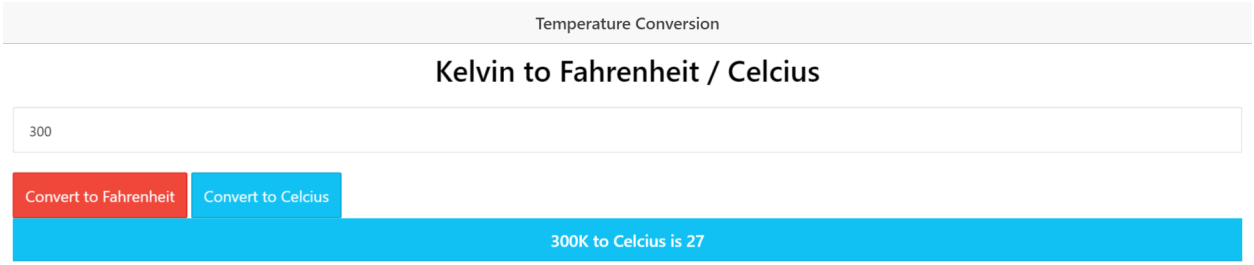
Ionic lab



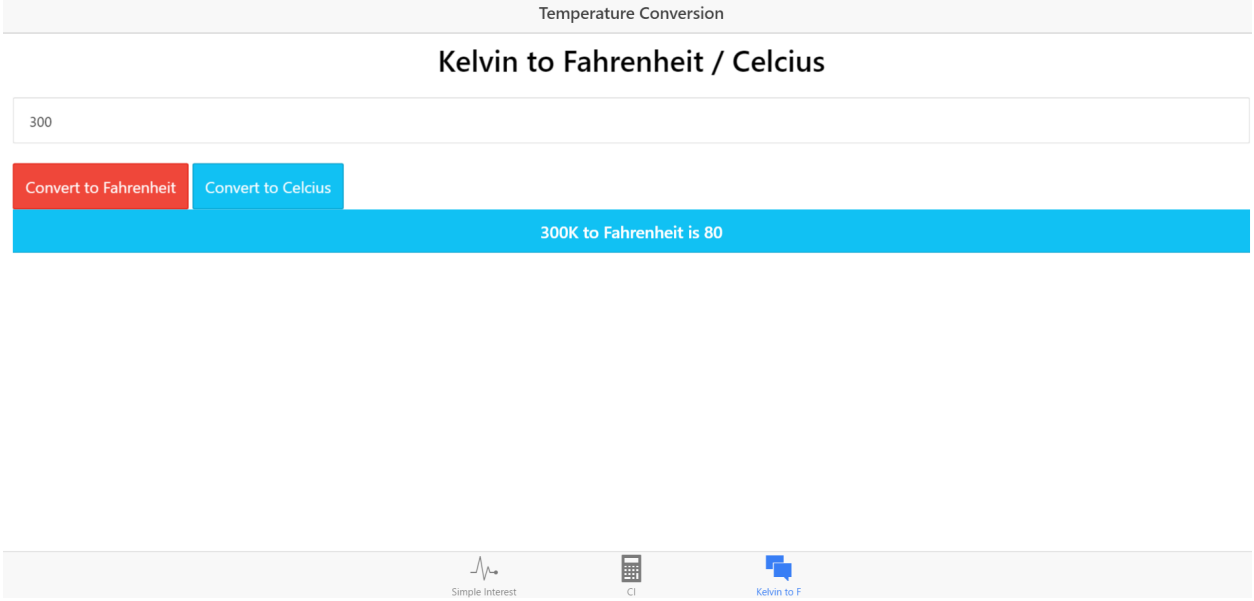
Using Ionic serve


Simple Interest
Simple Interest Calculation Tool
5000
12
5
Calculate
Simple Interest is 3000
Simple Interest
CI
Kelvin to F


Compound Interest
Compound Interest Calculation Tool
994994
923
32
12
Calculate
Compound Interest is 9776000
Simple Interest
CI
Kelvin to F


Temperature Conversion
Kelvin to Fahrenheit / Celcius
300
Convert to Fahrenheit
Convert to Celcius
300K to Celcius is 27

Simple Interest
CI
Kelvin to F


Temperature Conversion
Kelvin to Fahrenheit / Celcius
300
Convert to Fahrenheit
Convert to Celcius
300K to Fahrenheit is 80

Simple Interest
CI
Kelvin to F