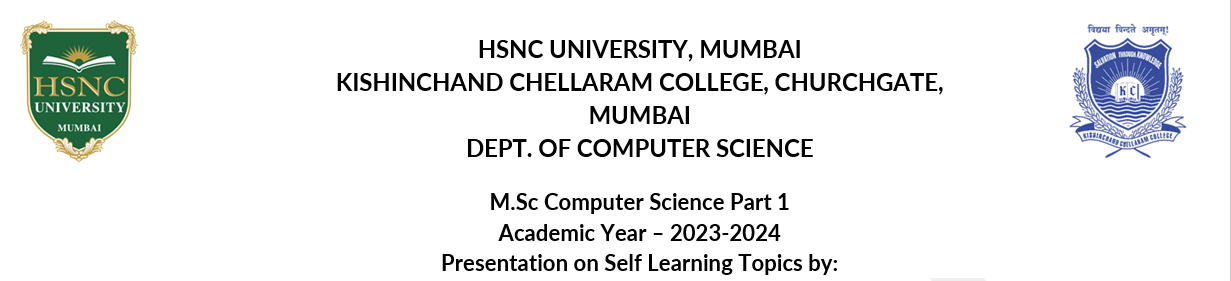
‘



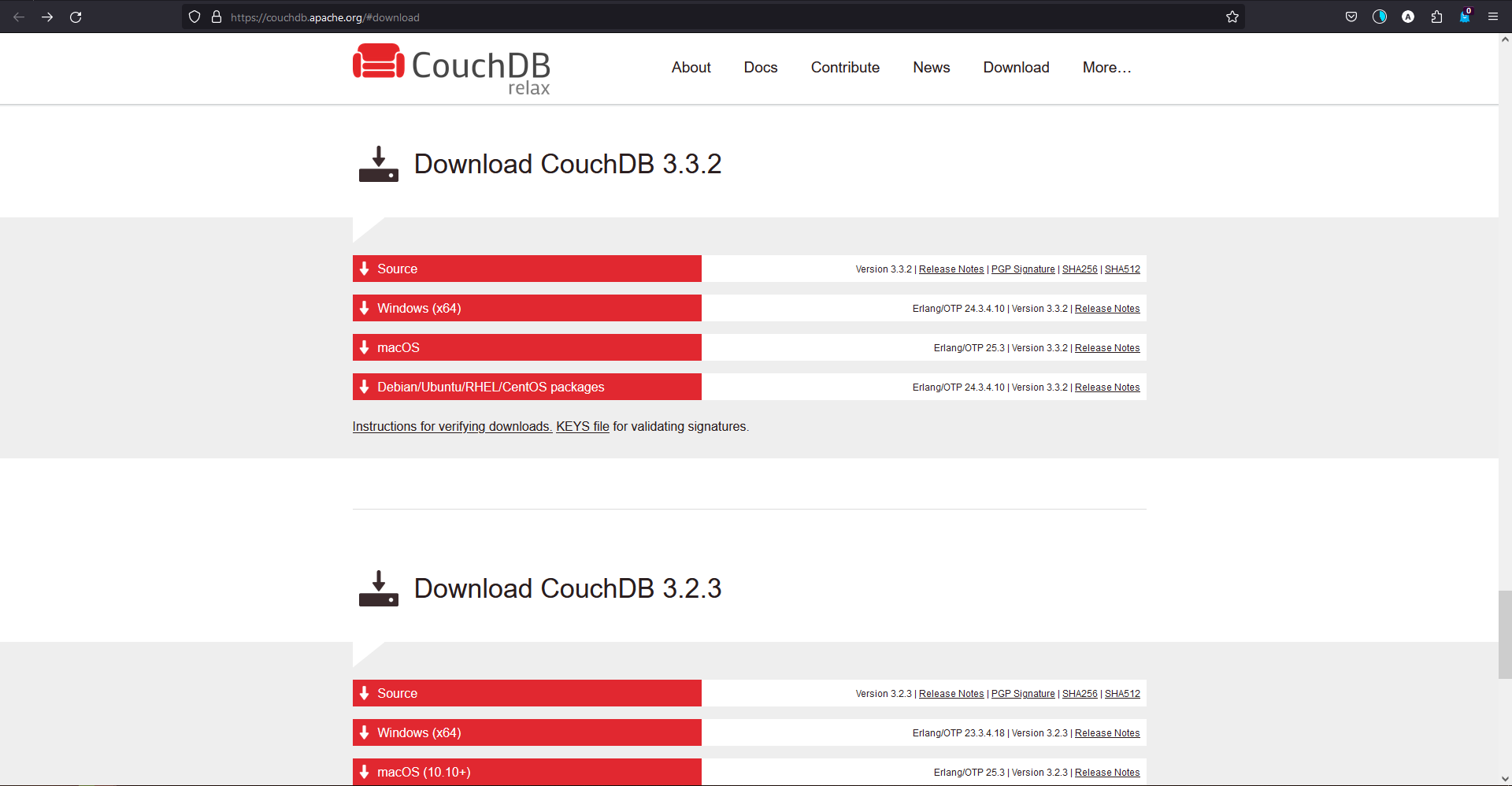
|  |  |
| --- | --- |
| Roll no. | name |
| Kfpmsccs005 | calvin |
| Kfpmsccs006 | durvesh |
| Kfpmsccs007 | ganesh |
| Kfpmsccs008 | hanif |

Couch DB

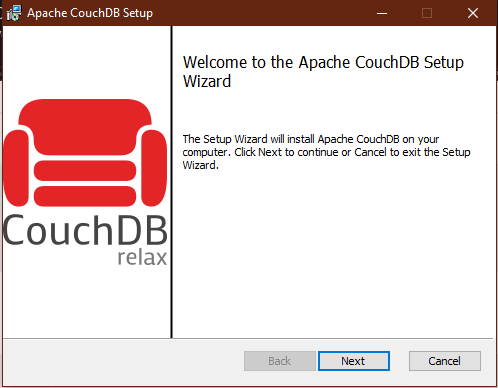
**Aim :** To Demonstrate Installation of CouchDB

Procedure :

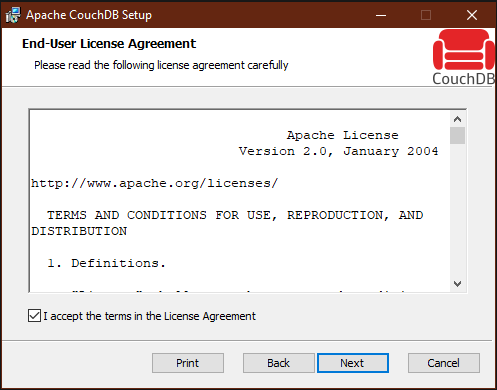
1. **Download CouchDB**:
   1. Go to the official CouchDB website to download the Windows installer:<https://couchdb.apache.org/#download>
   2. Choose the version you want to install and download the installer that matches your Windows version (32-bit or 64-bit).



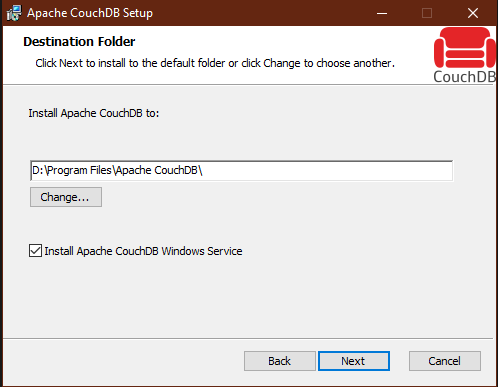
1. **Run the Installer**:
   1. Double-click the downloaded installer to run it.
   2. Click On Next



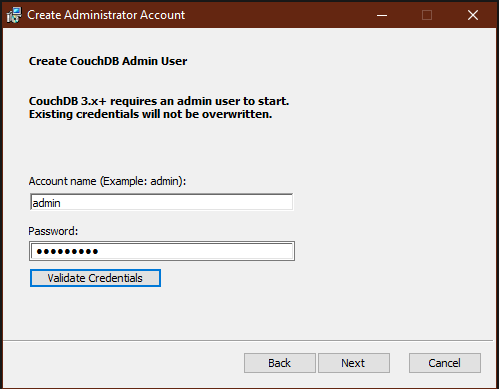
* 1. Click on accept and Next.



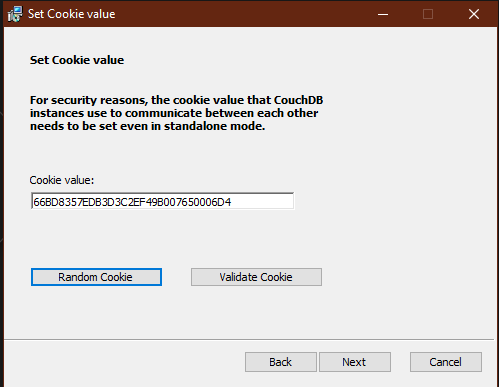
* 1. Select the desired location



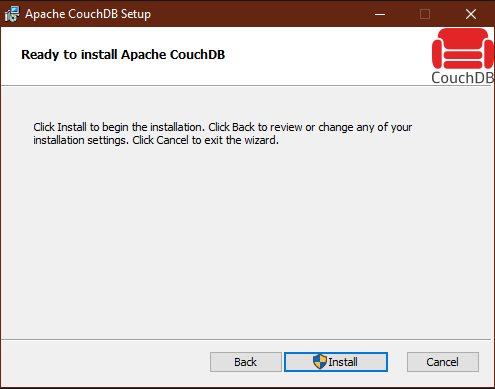
* 1. Create CouchDB admin credentials



* 1. Set the cookie value to a random

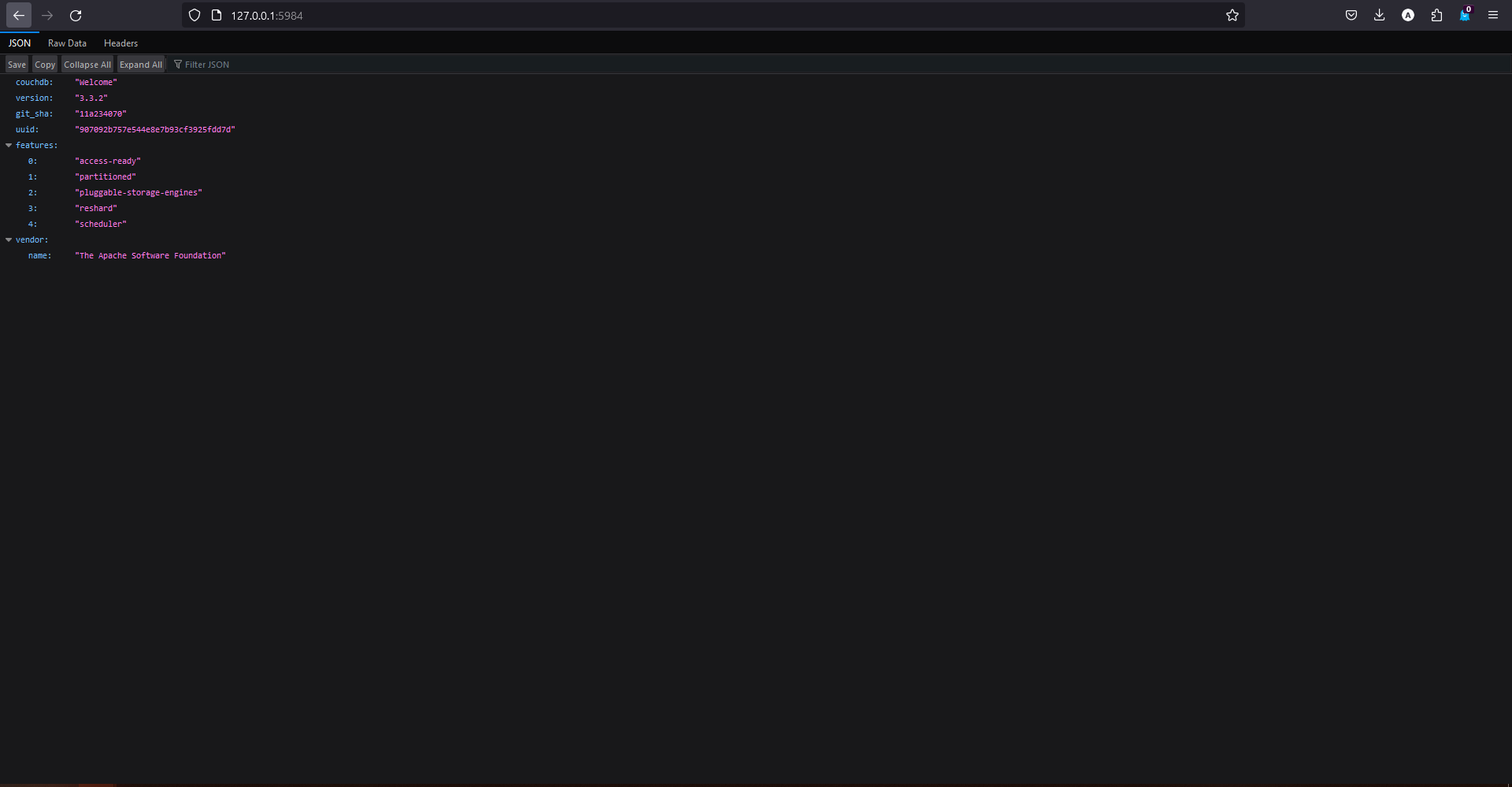


* 1. Click on install

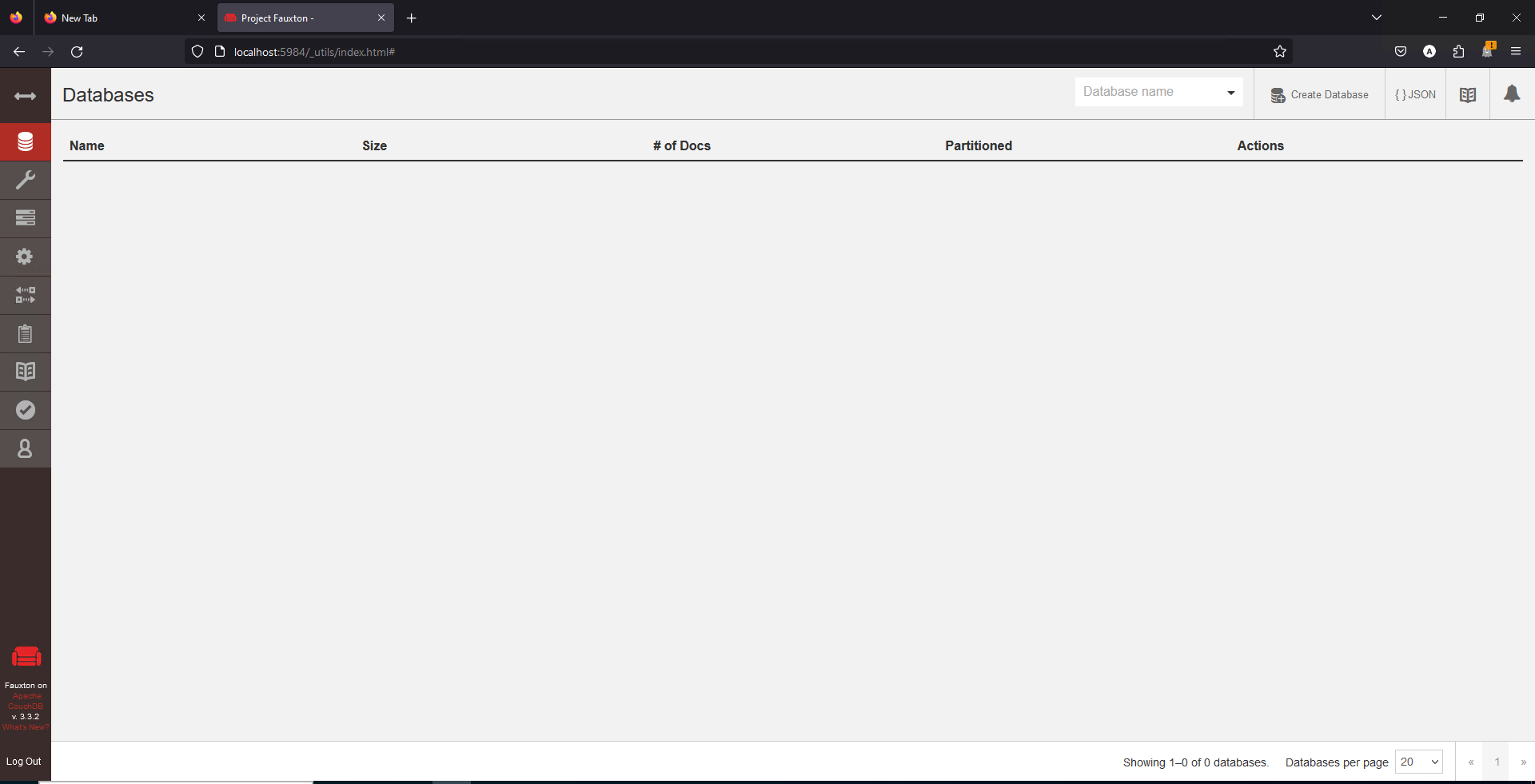


* 1. Once the installation is complete click on finish

1. **Configure CouchDB**:
   1. Now that you've successfully installed CouchDB, After installation, open built-in web interface of CouchDB by visiting the following link: <http://127.0.0.1:5984/>



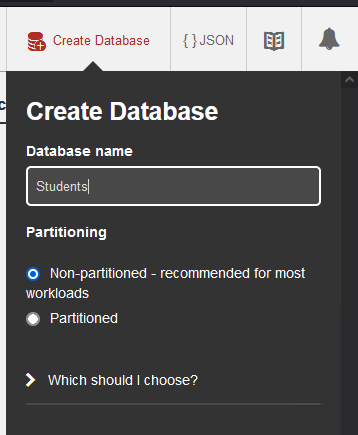
* 1. Open your web browser and enter the following URL: http://127.0.0.1:5984/\_utils/ . and login using the given credentials.



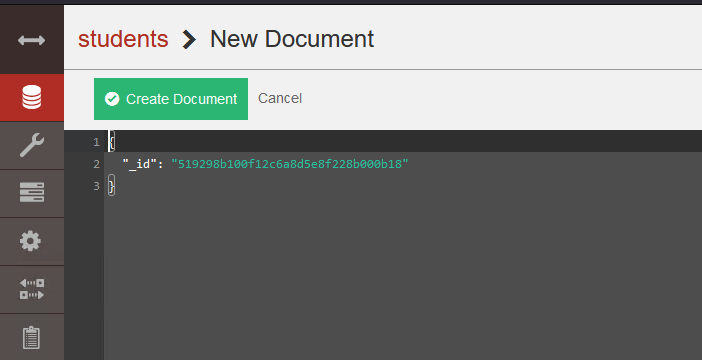
With this the installation of CouchDB has been successfully completed.

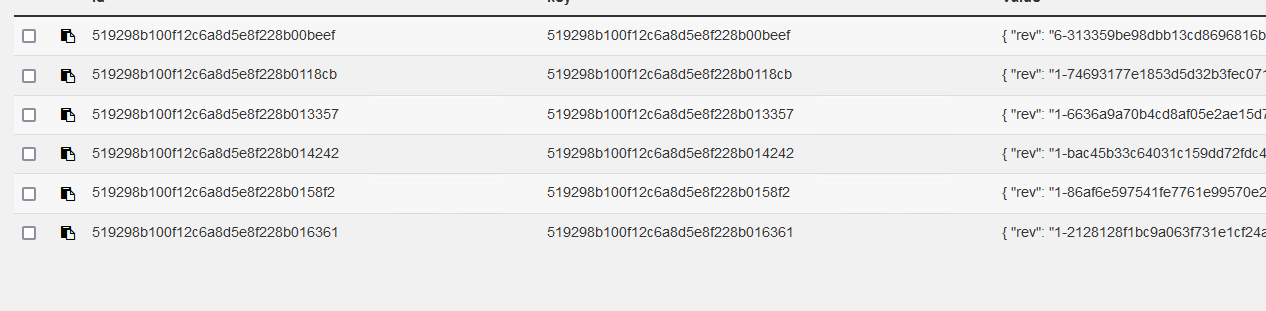
**Aim :** To Perform CRUD Operations in CouchDB.

1. Creating a database
   1. Click on the Create Database to manually create a database.

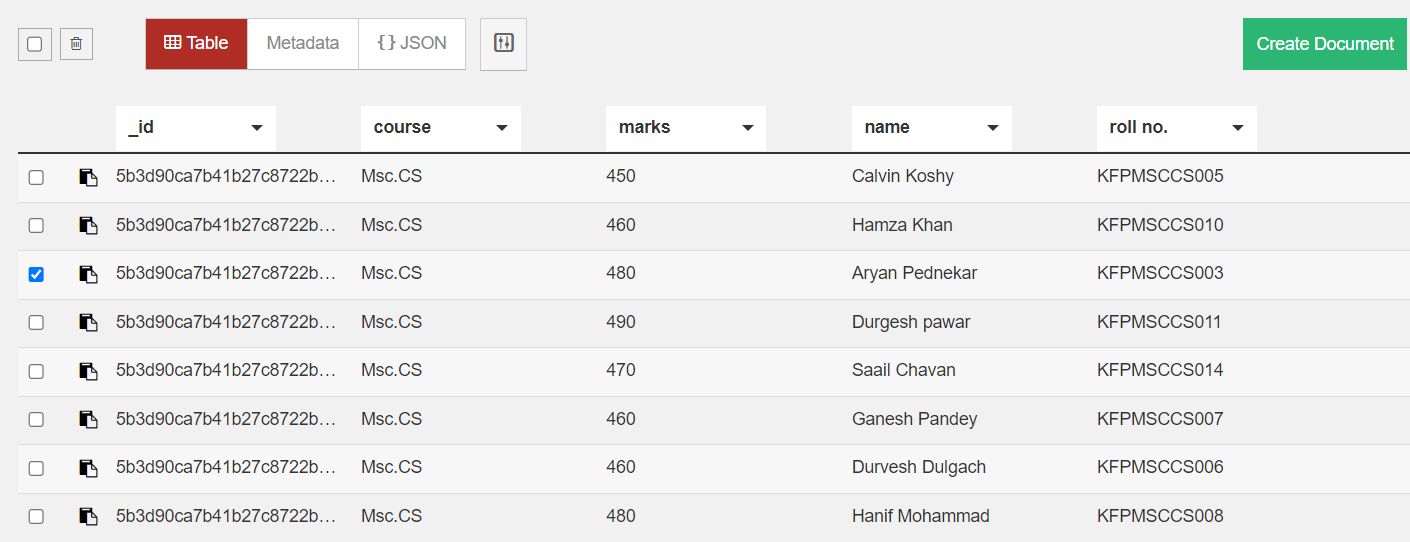


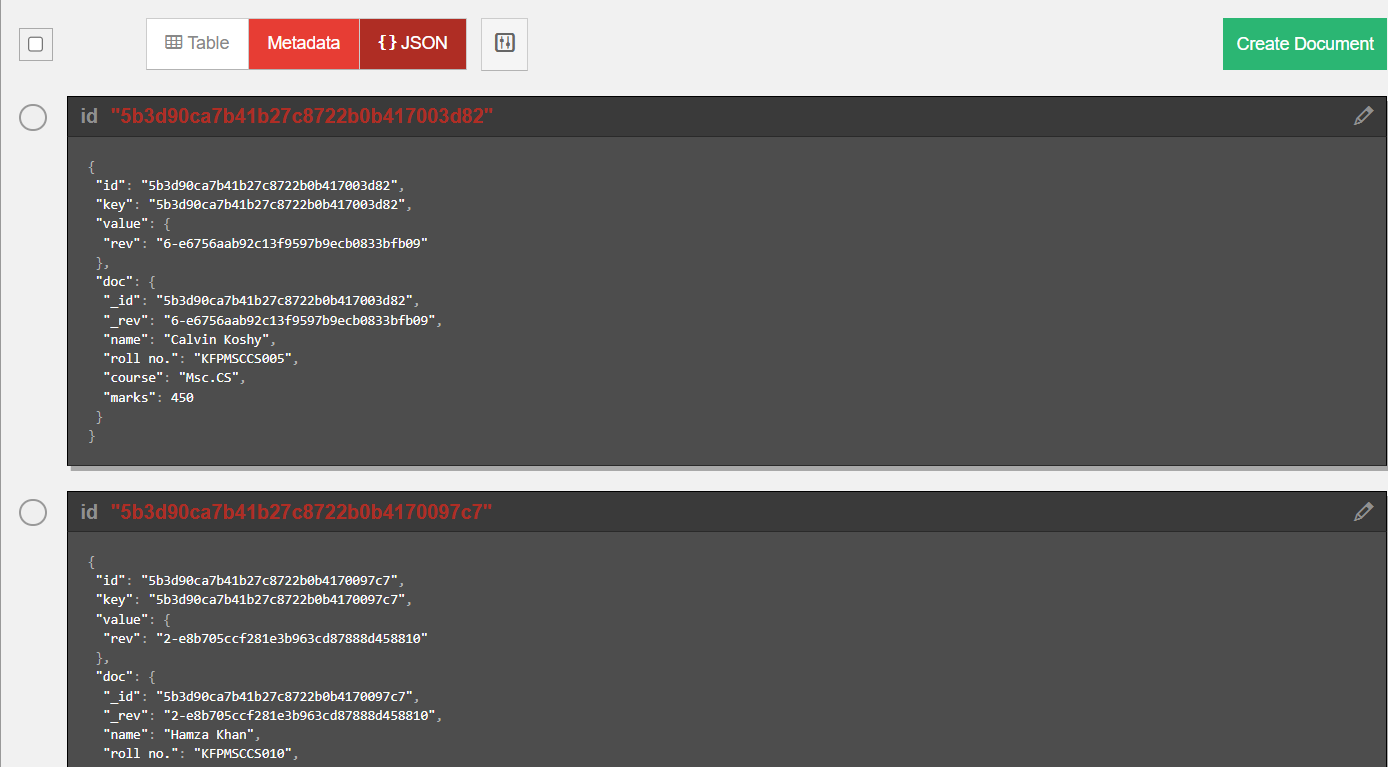
* 1. To Create a document click on the database you created and then click on “create database”





1. Reading database
   1. You can read the document just by clicking on it

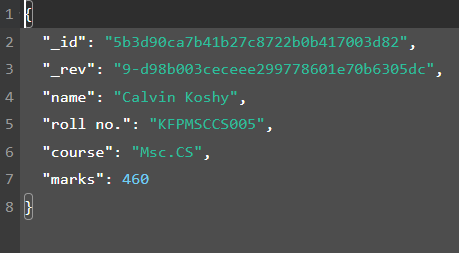


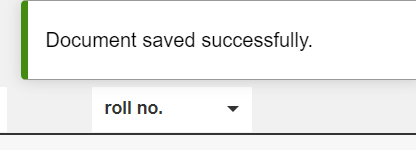


1. Updating database
   1. To Change the values of the document you can open the document, do the changes and then hit save changes.
   2. The document before the changes were made.



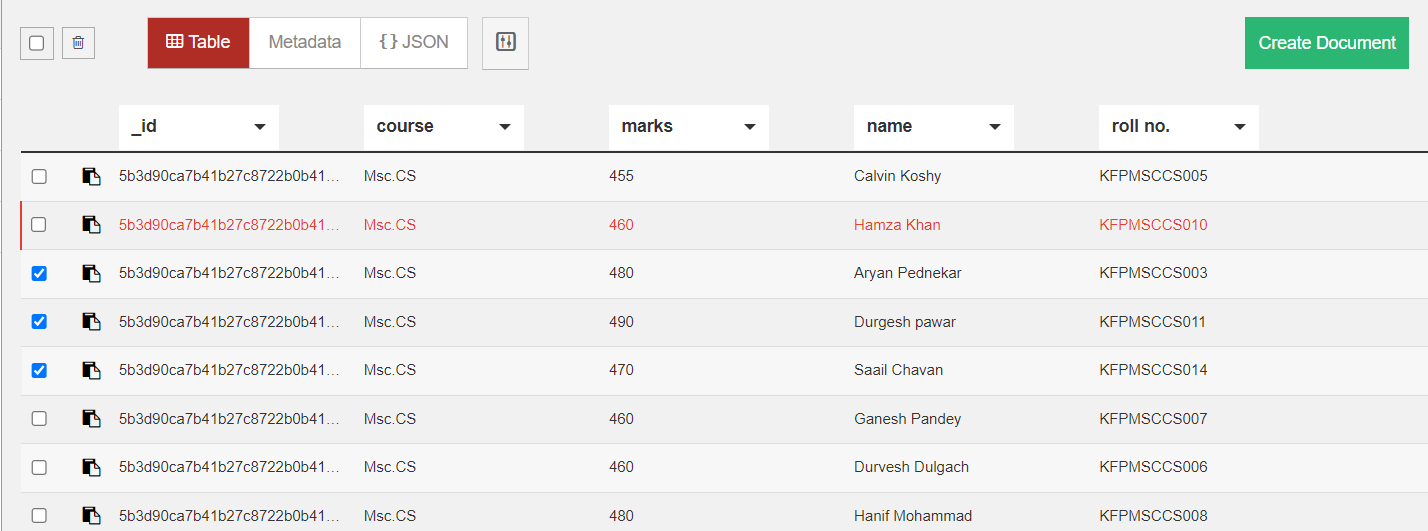
3.3 The document after the changes were made.



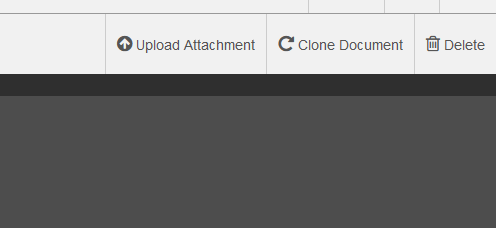


3.4 Here I changed the Marks from 455 to 460 simply by just editing the document.

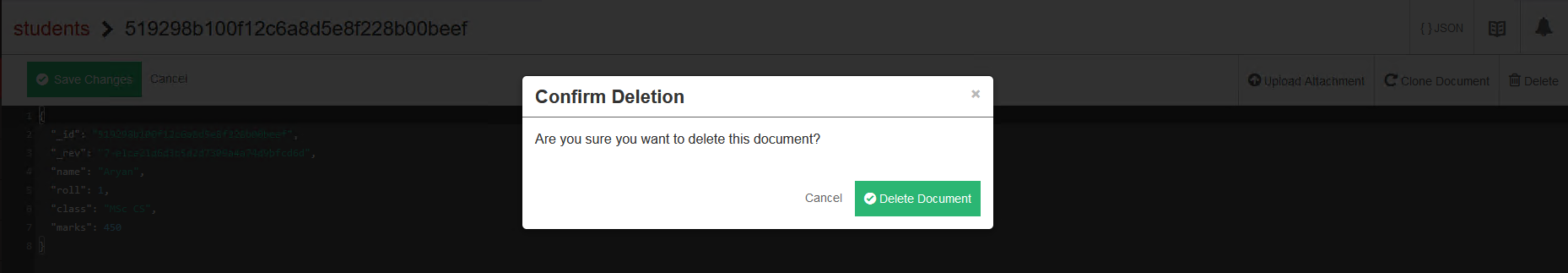
You can notice that every time you update the document the rev value of the document also changes, The first number of rev indicates how many revisions there have been i.e. how many times it has been updated.

1. Deleting
   * 1. To delete a document you have to select the document/documents you want to delete 

4.2 Then you have to click on delete on right side



4.3 The give conformation to finally delete the document.



Aim:- Creating Views on Couch DB

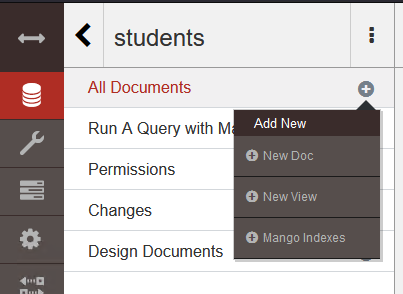
### Creating Views:

To Create View

Open the database

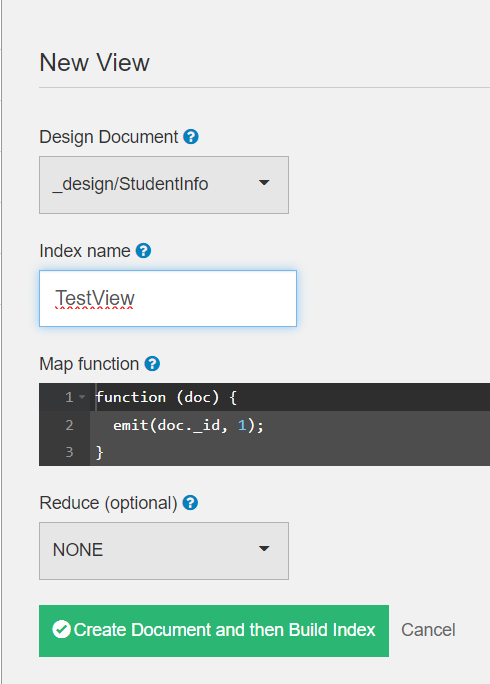
Click on the + next to design document

New View



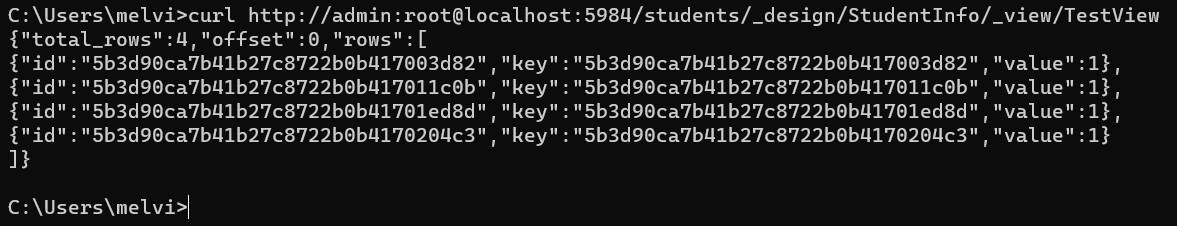
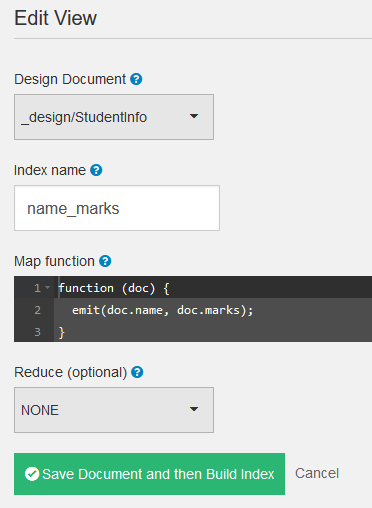
You can add view to an existing design document or create a new one

Create a new one called: "StudentInfo" and view called: "TestView”

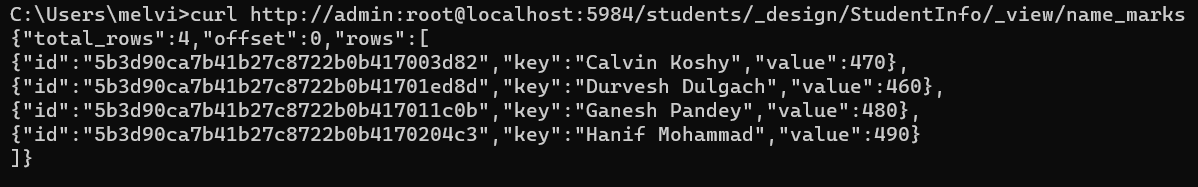


Viewing the created View

curl <http://admin:root@localhost:5984/students/_design/StudentInfo/_view/TestView>

 We can create a view just to display the name and marks of the student

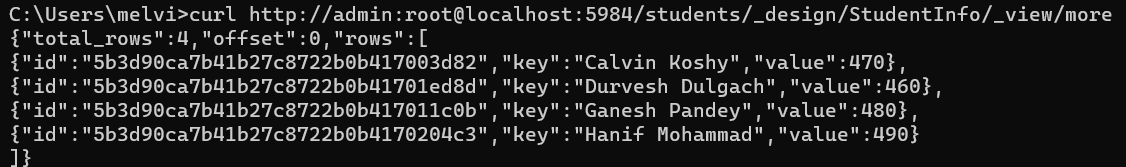
Curl http://admin:root@localhost:5984/students/\_design/StudentInfo/\_view/name\_marks



**Display Marks less than 450**



curl http://admin:root@localhost:5984/students/\_design/StudentInfo/\_view/more



Aim : HTTP URL Paths and Commands Using CURL to Interact with CouchDB for CRUD Operations.

**1. Check CouchDB Server Status:**

**>curl http://admin:root@localhost:5984/**

{"couchdb":"Welcome","version":"3.3.2","git\_sha":"11a234070","uuid":"52a206d18afee5c0a8c72b2dbe

baff75","features":["access-ready","partitioned","pluggable-storageengines","reshard","scheduler"],"vendor":{"name":"The Apache Software Foundation"}}

**2. Create Employee Document:**

**>curl -X PUT http://admin:root@localhost:5984/employee/001 -H "Content-Type: application/json"**

**-d "{"empid":"101","empname":"Calvin","salary":"3000"}"**

{"ok":true,"id":"001","rev":"1-099964a79e3feca99feb1e3f1de2bff9"}

**>curl -X PUT http://admin:root@localhost:5984/employee/002 -H "Content-Type: application/json"**

**-d "{"empid":"102","empname":"Durvesh","salary":"2000"}"**

{"ok":true,"id":"002","rev":"1-7e9054fe1e2d9bdb90704d9c3587e962"}

**>curl -X PUT http://admin:root@localhost:5984/employee/003 -H "Content-Type: application/json"**

**-d "{"empid":"103","empname":"Ganesh","salary":"7000"}"**

{"ok":true,"id":"003","rev":"1-90861440dd0ae471a16a0eb0bf71c53a"}

**>curl -X PUT http://admin:root@localhost:5984/employee/004 -H "Content-Type: application/json"**

**-d "{"empid":"104","empname":"Hanif","salary":"1000"}"**

{"ok":true,"id":"004","rev":"1-73655c91814039cac3597a7bc64edba2"}

**>curl -X PUT http://admin:root@localhost:5984/employee/005 -H "Content-Type: application/json"**

**-d "{"empid":"105","empname":"Albin","salary":"10000"}"**

{"ok":true,"id":"005","rev":"1-261fe29149ce994a6d945f2b1cbdade5"}

**>curl -X PUT http://admin:root@localhost:5984/employee/006 -H "Content-Type: application/json"**

**-d "{"empid":"106","empname":"Bhushan","salary":"7000"}"**

{"ok":true,"id":"006","rev":"1-a6590385e16c4a00568f74584c4b6aa9"}

**3. List All Databases:**

**>curl -X GET http://admin:root@localhost:5984/\_all\_dbs**

["employee","student","testdb"]

**4. Retrieve Employee Document by ID:**

**>curl -X GET http://admin:root@localhost:5984/employee/001**

{"\_id":"001","\_rev":"1-

099964a79e3feca99feb1e3f1de2bff9","empid":"101","empname":"Calvin","salary":"3000"}

**>curl -X GET http://admin:root@localhost:5984/employee/006**

**{"\_id":"006","\_rev":"1-**

a6590385e16c4a00568f74584c4b6aa9","empid":"106","empname":"Bhushan","salary":"7000"}

**5. List All Documents in the "emp" Database:**

**>curl -X GET http://admin:root@localhost:5984/employee/\_all\_docs**

{"total\_rows":6,"offset":0,"rows":[

{"id":"001","key":"001","value":{"rev":"1-099964a79e3feca99feb1e3f1de2bff9"}},

{"id":"002","key":"002","value":{"rev":"1-7e9054fe1e2d9bdb90704d9c3587e962"}},

{"id":"003","key":"003","value":{"rev":"1-90861440dd0ae471a16a0eb0bf71c53a"}},

{"id":"004","key":"004","value":{"rev":"1-73655c91814039cac3597a7bc64edba2"}},

{"id":"005","key":"005","value":{"rev":"1-261fe29149ce994a6d945f2b1cbdade5"}},

{"id":"006","key":"006","value":{"rev":"1-a6590385e16c4a00568f74584c4b6aa9"}}

]}

**6. Delete Employee Document with Revision:**

**>curl -X DELETE http://admin:root@localhost:5984/employee/004?rev=1-**

**73655c91814039cac3597a7bc64edba2**

{"ok":true,"id":"004","rev":"2-b0b531db5b24345655c187462e1ea7a5"}

**>curl -X GET http://admin:root@localhost:5984/employee/\_all\_docs**

{"total\_rows":5,"offset":0,"rows":[

{"id":"001","key":"001","value":{"rev":"1-099964a79e3feca99feb1e3f1de2bff9"}},

{"id":"002","key":"002","value":{"rev":"1-7e9054fe1e2d9bdb90704d9c3587e962"}},

{"id":"003","key":"003","value":{"rev":"1-90861440dd0ae471a16a0eb0bf71c53a"}},

{"id":"005","key":"005","value":{"rev":"1-261fe29149ce994a6d945f2b1cbdade5"}},

{"id":"006","key":"006","value":{"rev":"1-a6590385e16c4a00568f74584c4b6aa9"}}

]}

**7. Update Employee Document with Revision:**

>curl -X PUT http://admin:root@localhost:5984/employee/001 -H "Content-Type: application/json"

-d "{"empid":"101","empname":"Calvin","salary":"5000","yop":"5","\_rev":"1-

099964a79e3feca99feb1e3f1de2bff9"}"

{"ok":true,"id":"001","rev":"2-48f49990abb89176a3f40b0a1aabcf80"}

**>curl -X PUT http://admin:root@localhost:5984/employee/002 -H "Content-Type: application/json"**

**-d "{"empid":"102","empname":"Durvesh","salary":"2000","yop":"5","\_rev":"1-**

**7e9054fe1e2d9bdb90704d9c3587e962"}"**

{"ok":true,"id":"002","rev":"2-45c3da844221f4f6056c5a474ffa96ad"}

**>curl -X PUT http://admin:root@localhost:5984/employee/003 -H "Content-Type: application/json"**

**-d "{"empid":"103","empname":"Ganesh","salary":"7000","yop":"2","\_rev":"1-**

**90861440dd0ae471a16a0eb0bf71c53a"}"**

{"ok":true,"id":"003","rev":"2-009fe8daf06a268be48913662b50aa83"}

**>curl -X PUT http://admin:root@localhost:5984/employee/006 -H "Content-Type: application/json"**

**-d "{"empid":"106","empname":"Bhushan","salary":"7000","yop":"6","\_rev":"2-**

**0ae8afc910dcdab83da578de02cf97a2"}"**

{"ok":true,"id":"006","rev":"3-518a24481156bd92917f37abda5f854b"}