

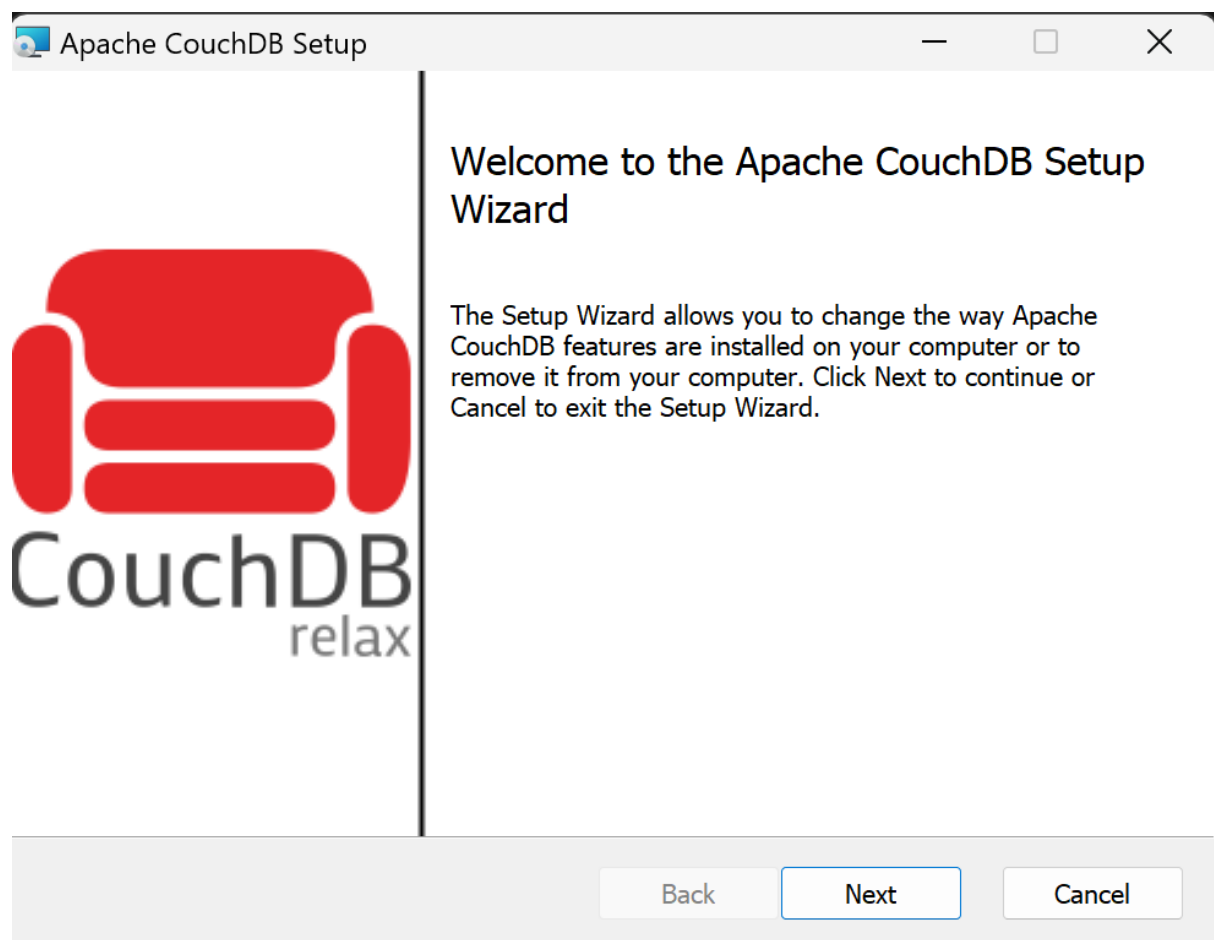
## DBMS LAB ASSESSMENT-4

### NOSQL

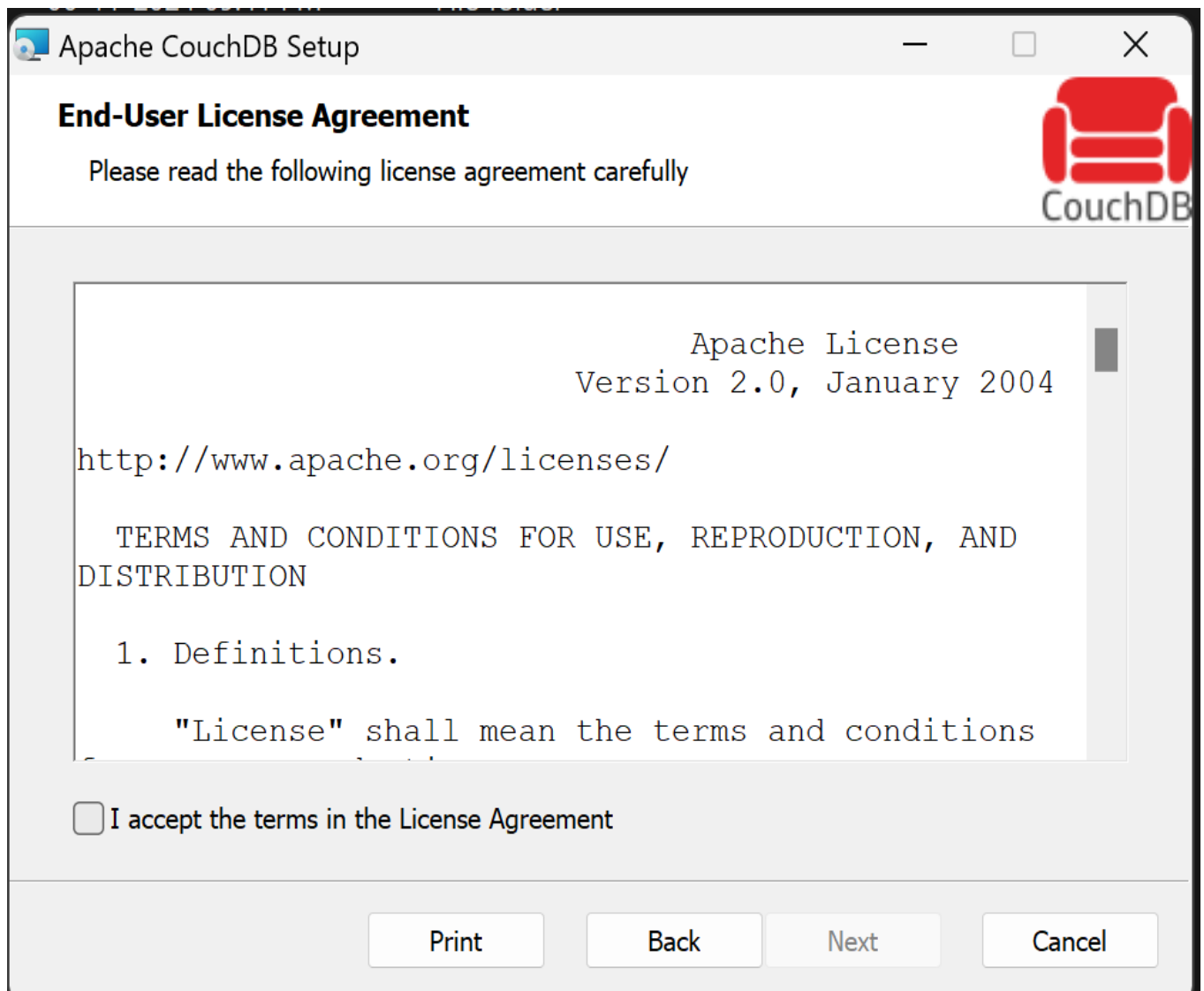
### COUCHE DB

#### INSTALLATION OF COUCHE DB

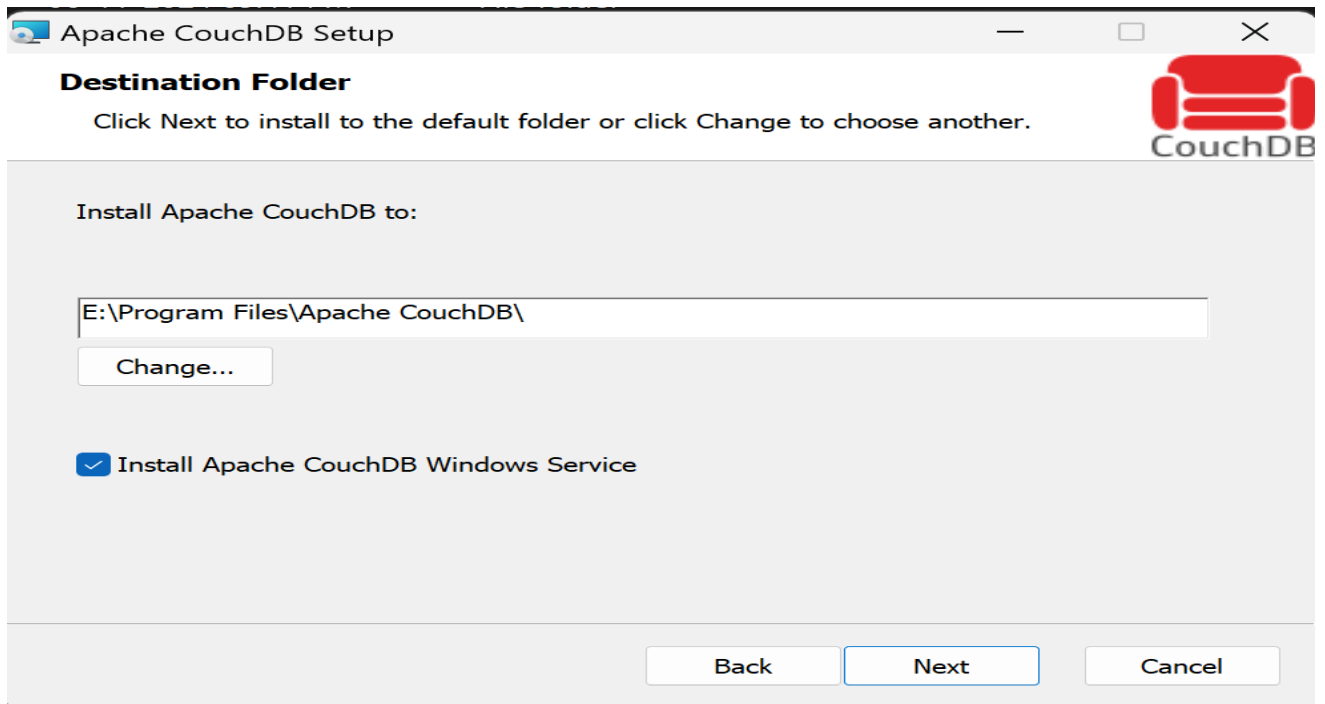
##### 1) SETUP WIZARD:



## 2) TERMS AND CONDITIONS



### 3) ASSIGNING LOCATION



The screenshot shows the 'Destination Folder' step of the Apache CouchDB Setup window. The window title is 'Apache CouchDB Setup'. The main heading is 'Destination Folder'. Below it, a message says 'Click Next to install to the default folder or click Change to choose another.' The CouchDB logo is in the top right corner. The text 'Install Apache CouchDB to:' is followed by a text box containing 'E:\Program Files\Apache CouchDB\'. Below the text box is a 'Change...' button. A checkbox labeled 'Install Apache CouchDB Windows Service' is checked. At the bottom are 'Back', 'Next', and 'Cancel' buttons.

Apache CouchDB Setup

**Destination Folder**

Click Next to install to the default folder or click Change to choose another.

Install Apache CouchDB to:

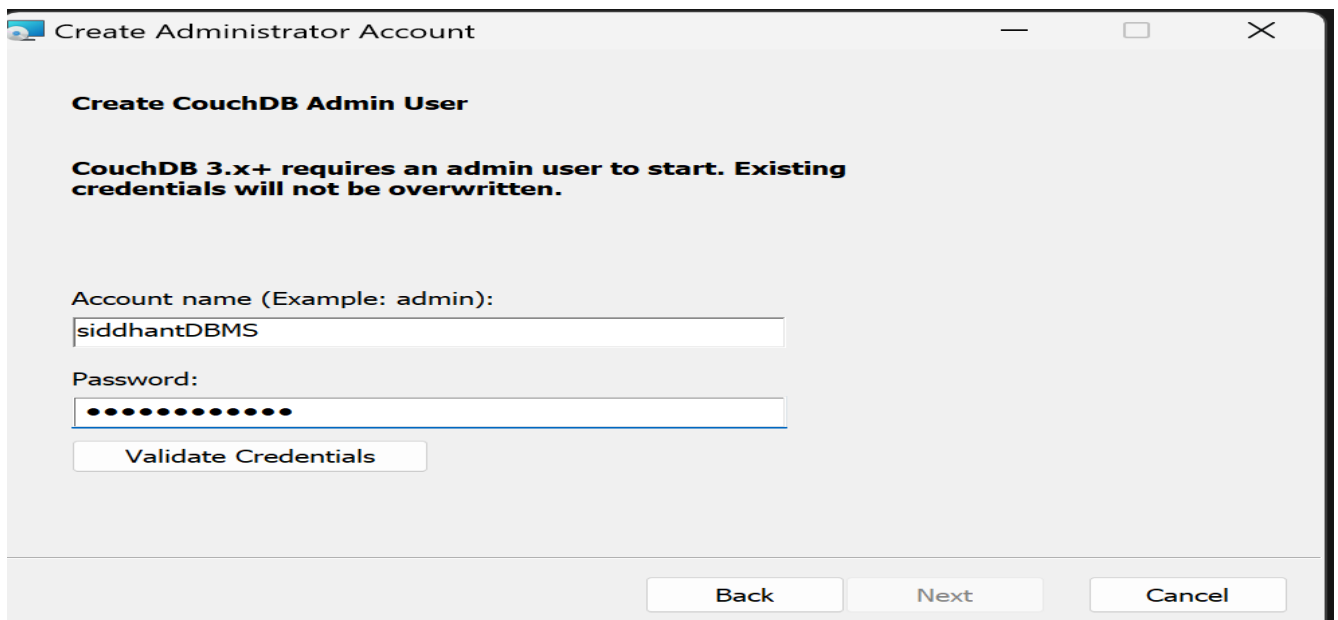
E:\Program Files\Apache CouchDB\

Change...

☒ Install Apache CouchDB Windows Service

Back Next Cancel

### 4) CREATING ACCOUNT & VALIDATING CREDENTIALS



The screenshot shows the 'Create Administrator Account' window. The window title is 'Create Administrator Account'. The main heading is 'Create CouchDB Admin User'. Below it, a message says 'CouchDB 3.x+ requires an admin user to start. Existing credentials will not be overwritten.' There are two text boxes: 'Account name (Example: admin):' with the value 'siddhantDBMS' and 'Password:' with masked characters. Below the password box is a 'Validate Credentials' button. At the bottom are 'Back', 'Next', and 'Cancel' buttons.

Create Administrator Account

**Create CouchDB Admin User**

CouchDB 3.x+ requires an admin user to start. Existing credentials will not be overwritten.

Account name (Example: admin):

siddhantDBMS

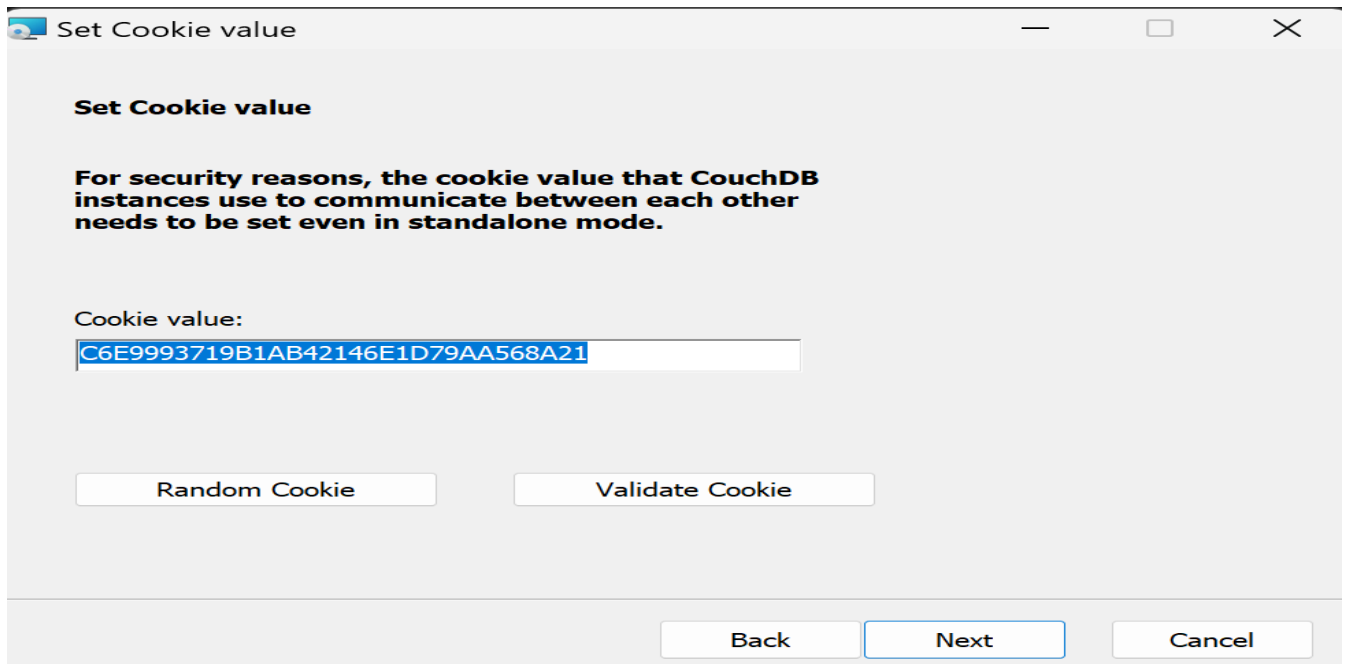
Password:

.....

Validate Credentials

Back Next Cancel

## 5) COOKIE VALUE SET UP

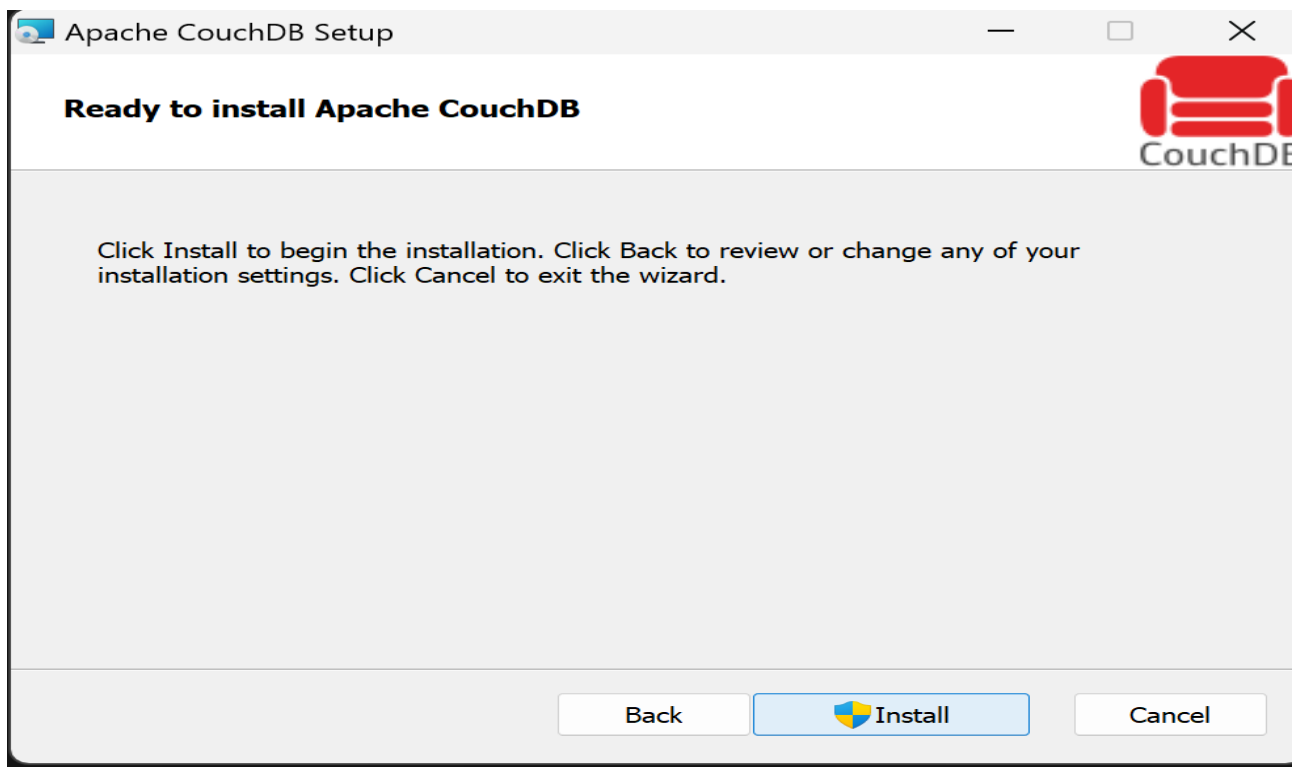


**Set Cookie value**

For security reasons, the cookie value that CouchDB instances use to communicate between each other needs to be set even in standalone mode.

Cookie value:

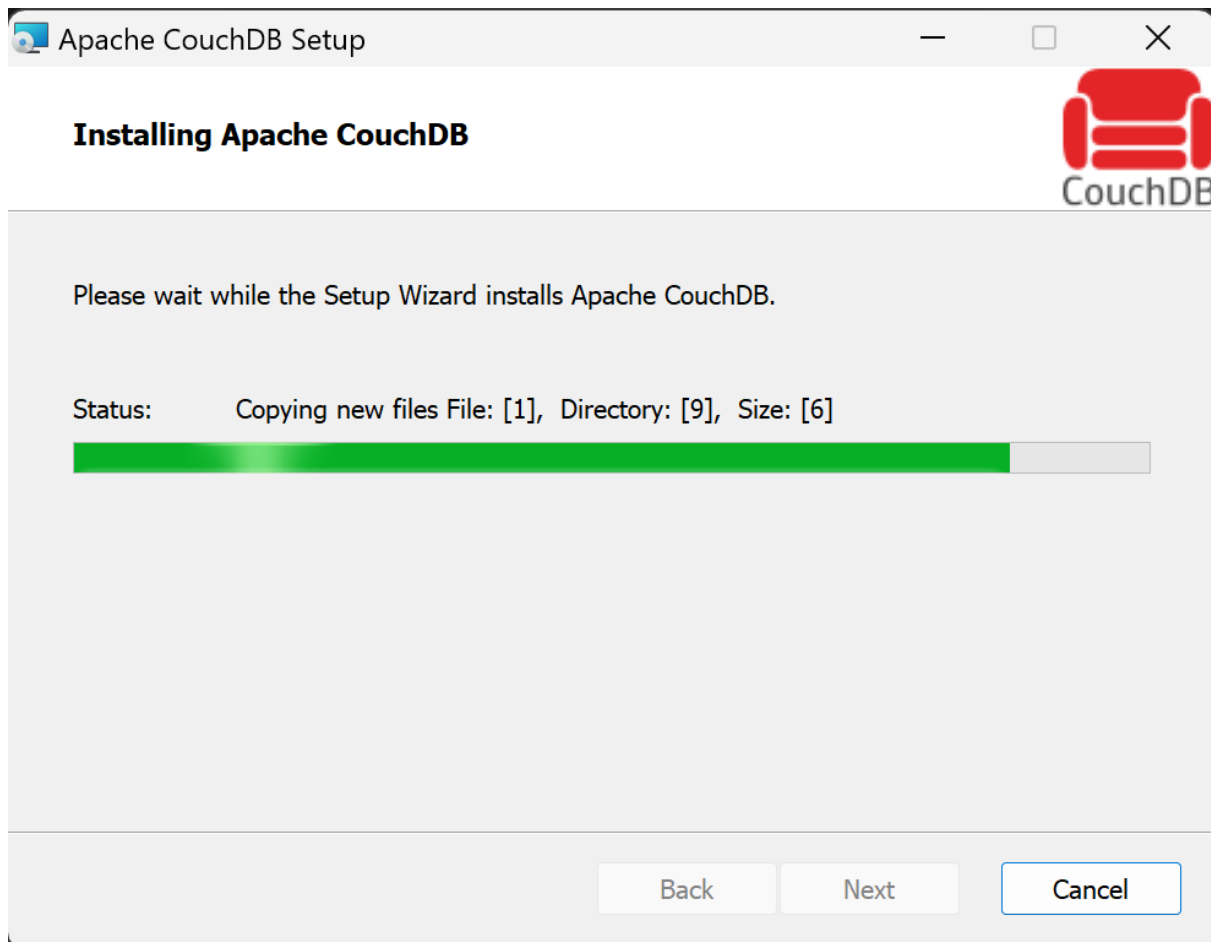
## 6) INSTALLATION



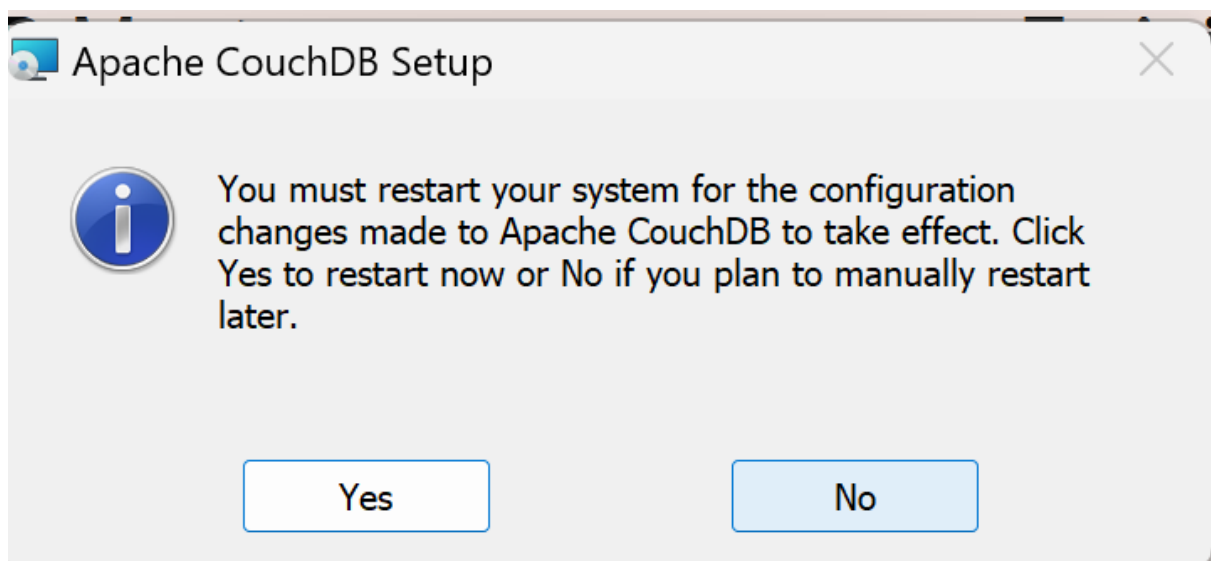
**Apache CouchDB Setup**

**Ready to install Apache CouchDB**

Click Install to begin the installation. Click Back to review or change any of your installation settings. Click Cancel to exit the wizard.



## 7) INSTALLED



## 8) LOGGING IN

Log In to CouchDB

Enter your username and password

siddhantDBMS

Password

Log In

Fauxton on Apache CouchDB v. 3.4.2 What's New? Login

## 9) VERIFYING INSTALLATION

Verify CouchDB Installation

Verify Installation

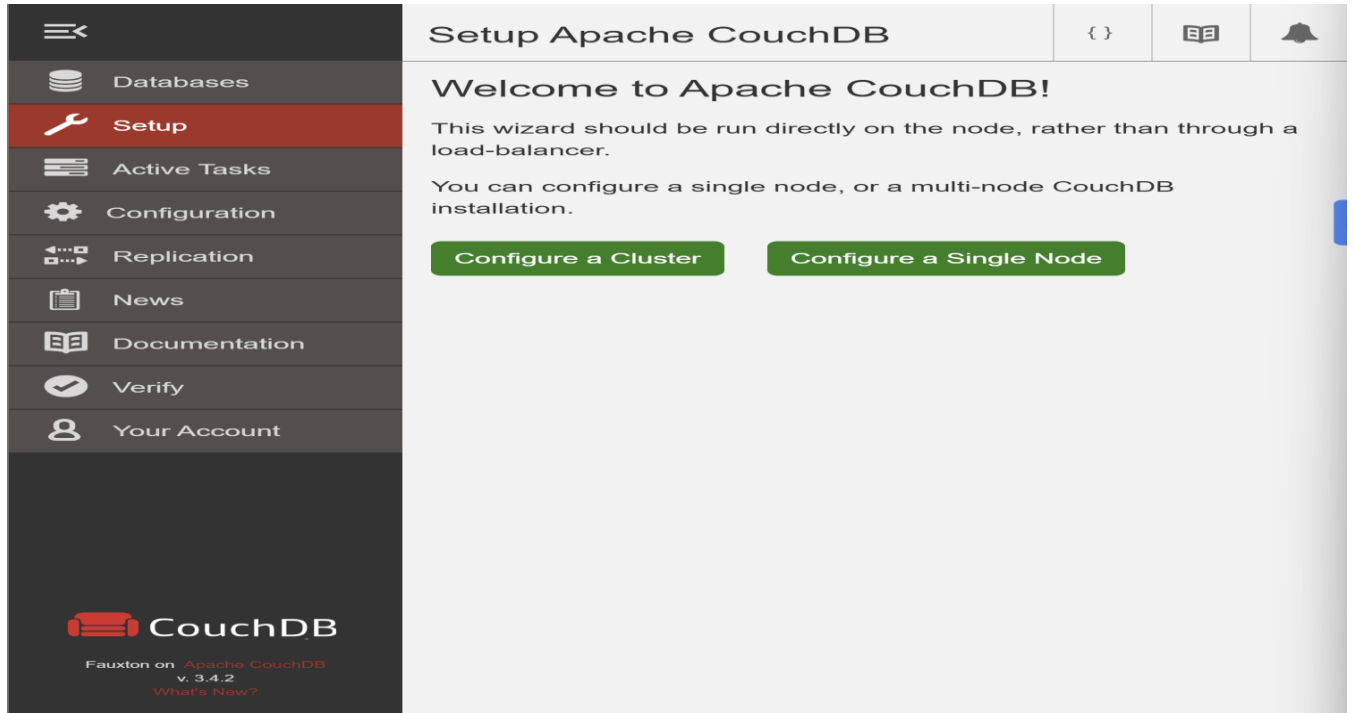
Test	Status
Create Database	✓ success
Create Document	✓ success
Update Document	✓ success
Delete Document	✓ success
Create View	✓ success
Replication	✓ success

CouchDB

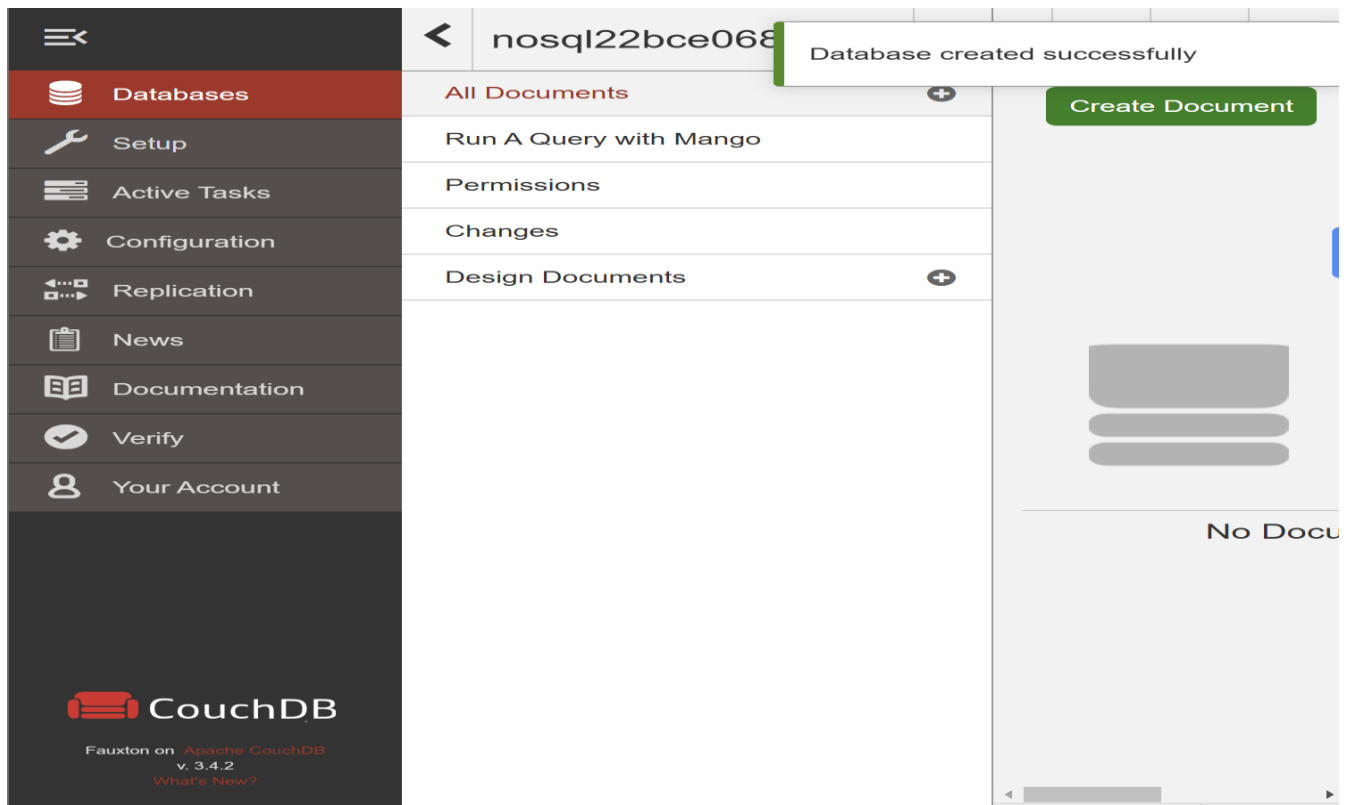
Fauxton on Apache CouchDB v. 3.4.2 What's New?

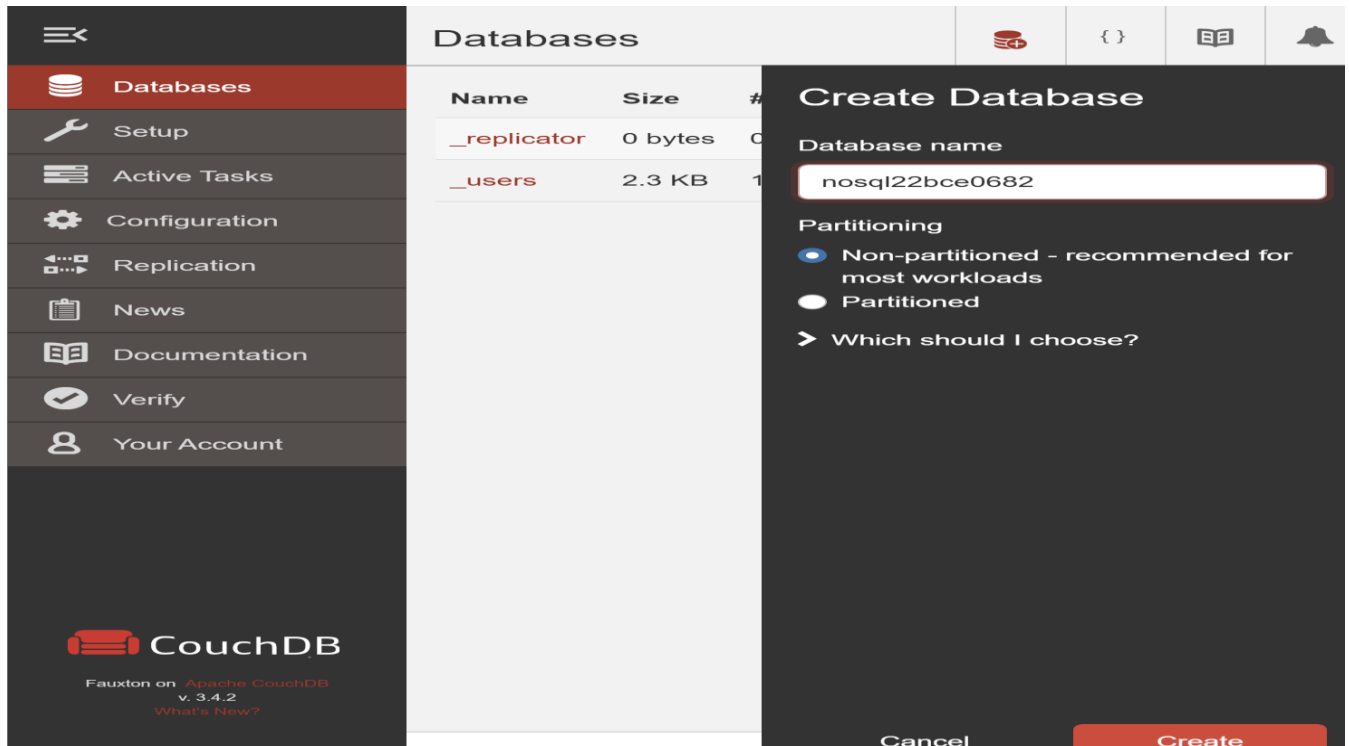
## EXERCISE

### 10) SETTING UP COUCHDB

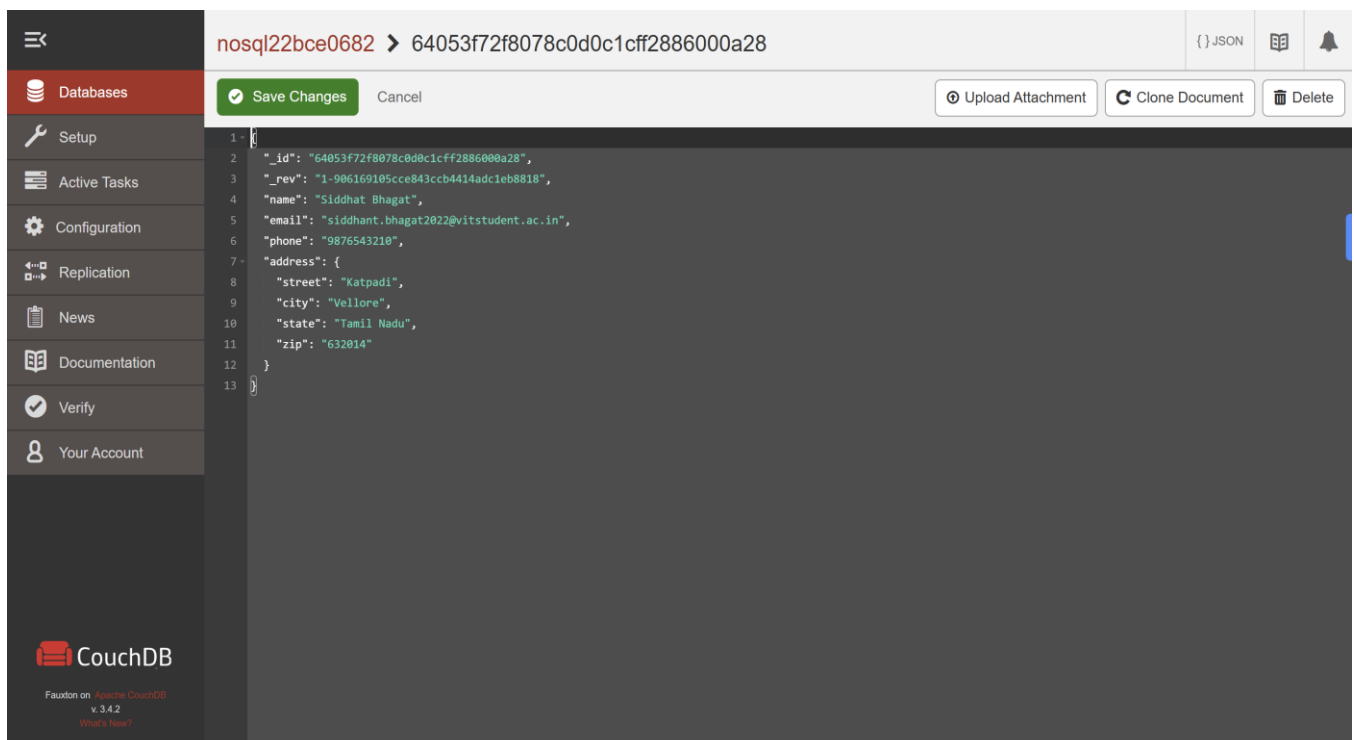


### 11) CREATING DATABASE





## 12) INSERTING VALUES IN DATABASE





The screenshot shows the CouchDB web interface. The left sidebar contains navigation links: Databases, Setup, Active Tasks, Configuration, Replication, News, Documentation, Verify, and Your Account. The main area displays a document with the following JSON structure:

```
1 {
2   "_id": "64053f72f8078c0d0c1cff28860044d6",
3   "_rev": "1-fb13044559231a5c16bd115236299569",
4   "name": "Cristiano Ronaldo",
5   "email": "ronaldo.bhagat2022@vitstudent.ac.in",
6   "phone": "8876543210",
7   "address": {
8     "street": "Judges Colony",
9     "city": "Gaya",
10    "state": "Bihar",
11    "zip": "832014"
12  }
13 }
```

At the top, there is a notification "Document saved successfully." and buttons for "Save Changes", "Cancel", "Upload Attachment", "Clone Document", and "Delete". The CouchDB logo and version information (Fauxton on Apache CouchDB v.3.4.2) are visible in the bottom left.

### 13) SETTING UP DATABASE VIEW

The screenshot shows the CouchDB web interface with the "New View" configuration screen. The left sidebar is the same as in the previous screenshot. The main area shows the following configuration:

- Design Document:** A dropdown menu set to "New document".
- Index name:** A text input field containing "id".
- Map function:** A code editor with the following JavaScript code:

```
1 function (doc) {
2   emit(doc._id, 1);
3 }
```
- Reduce (optional):** A dropdown menu set to "NONE".
- Buttons:** "Create Document and then Build Index" (highlighted in green) and "Cancel".

The CouchDB logo and version information are visible in the bottom left.

## 14) SETTING UP 2<sup>ND</sup> VIEW

**New View**

Design Document ?

Index name ?

Map function ?  

```
1 function (doc) {  
2   emit(doc._id, doc.name);  
3 }
```

Reduce (optional) ?

## 15) SETTING UP 3<sup>RD</sup> VIEW

**Edit View**

Design Document ?

Index name ?

Map function ?  

```
1 function (doc) {  
2   emit(doc._id, {name:doc.name,email:doc.email,phone:doc.phone,address:doc.address});  
3 }
```

Reduce (optional) ?

## 16) DISPLAYING DATABASE IN JSON FORMAT

```

{
  "total_rows": 2,
  "offset": 0,
  "rows": [
    {
      "id": "64053f72f8078c0d0c1cff2886000a28",
      "key": "64053f72f8078c0d0c1cff2886000a28",
      "value": {
        "name": "Siddhat Bhagat",
        "email": "siddhant.bhagat2022@vitstudent.ac.in",
        "phone": "9876543210",
        "address": {
          "street": "Katpadi",
          "city": "Vellore",
          "state": "Tamil Nadu",
          "zip": "632014"
        }
      },
      "doc": {
        "_id": "64053f72f8078c0d0c1cff2886000a28",
        "_rev": "3-24140df2569fe30b23cabd0dea6e2290",
        "name": "Siddhat Bhagat",
        "email": "siddhant.bhagat2022@vitstudent.ac.in",
        "phone": "9876543210",
        "address": {
          "street": "Katpadi",
          "city": "Vellore",
          "state": "Tamil Nadu",
          "zip": "632014"
        }
      }
    },
    {
      "id": "64053f72f8078c0d0c1cff28860044d6",
      "key": "64053f72f8078c0d0c1cff28860044d6",
      "value": {
        "name": "Cristiano Ronaldo",
        "email": "ronaldo.bhagat2022@vitstudent.ac.in",
        "phone": "8876543210",
        "address": {
          "street": "Judges Colony",
          "city": "Gaya",

```

## 17) USING COMMAND TERMINAL SETTING UP SERVER

```

C:\Users\siddh>SET SERVER=http://siddhantdbms:123456@127.0.0.1:5984

C:\Users\siddh>ECHO %SERVER%
http://siddhantdbms:123456@127.0.0.1:5984

```

## 18) CHECKING AVAILABLE DATABASE

```

C:\Users\siddh>curl -X GET %SERVER%/_all_dbs
["_replicator", "_users", "nosql22bce0682"]

```

## 19) DISPLAYING THE DATABASE

```

C:\Users\siddh>curl -X GET %SERVER%/nosql22bce0682/_design/view3/_view/new-view
{"total_rows":2,"offset":0,"rows":[{"id":"64053f72f8078c0d0c1cff2886000a28","key":"64053f72f8078c0d0c1cff2886000a28","value":{"name":"Siddhat Bhagat","email":"siddhant.bhagat2022@vitstudent.ac.in","phone":"9876543210","address":{"street":"Katpadi","city":"Vellore","state":"Tamil Nadu","zip":"632014"}}}, {"id":"64053f72f8078c0d0c1cff28860044d6","key":"64053f72f8078c0d0c1cff28860044d6","value":{"name":"Cristiano Ronaldo","email":"ronaldo.bhagat2022@vitstudent.ac.in","phone":"8876543210","address":{"street":"Judges Colony","city":"Gaya","state":"Bihar","zip":"832014"}}}]

```

## 20) FETCHING UUIDS

```

C:\Users\siddh>curl -X GET %SERVER%/_uuids
{"uuids":["64053f72f8078c0d0c1cff2886009503"]}

```

**21) ADDING MORE VALUES TO THE DATABASE VIA TERMINAL**

```
C:\Users\siddh>curl -X PUT %SERVER%/nosql22bce0682/64053f72f8078c0d0c1cff2886009503 -d "{\"name\":\"Spider Man\", \"email\":\"spideyjj@gmail.com\"} {\"ok\":true, \"id\":\"64053f72f8078c0d0c1cff2886009503\", \"rev\":\"1-548f0295f992c750272aace43e562b90\"}"
```

**22) DISPLAYING ALL THE VALUES**

```
C:\Users\siddh>curl -X GET %SERVER%/nosql22bce0682/_design/view3/_view/new-view
{"total_rows":3, "offset":0, "rows":[
{"id":"64053f72f8078c0d0c1cff2886000a28", "key":"64053f72f8078c0d0c1cff2886000a28", "value":{"name":"Siddhat Bhagat", "email":"siddhant.bhagat2022@vitstudent.ac.in", "phone":"9876543210", "address":{"street":"Katpadi", "city":"Vellore", "state":"Tamil Nadu", "zip":"632014"}}},
{"id":"64053f72f8078c0d0c1cff28860044d6", "key":"64053f72f8078c0d0c1cff28860044d6", "value":{"name":"Cristiano Ronaldo", "email":"ronaldo.bhagat2022@vitstudent.ac.in", "phone":"8876543210", "address":{"street":"Judges Colony", "city":"Gaya", "state":"Bihar", "zip":"832014"}}},
{"id":"64053f72f8078c0d0c1cff2886009503", "key":"64053f72f8078c0d0c1cff2886009503", "value":{"name":"Spider Man", "email":"spideyjj@gmail.com"}}
]}
```

**23) VIEWING THE DATABASE**

```
id "64053f72f8078c0d0c1cff2886009503"

{
  "id": "64053f72f8078c0d0c1cff2886009503",
  "key": "64053f72f8078c0d0c1cff2886009503",
  "value": {
    "rev": "1-548f0295f992c750272aace43e562b90"
  },
  "doc": {
    "_id": "64053f72f8078c0d0c1cff2886009503",
    "_rev": "1-548f0295f992c750272aace43e562b90",
    "name": "Spider Man",
    "email": "spideyjj@gmail.com"
  }
}
```

```
id "64053f72f8078c0d0c1cff2886000a28"

{
  "id": "64053f72f8078c0d0c1cff2886000a28",
  "key": "64053f72f8078c0d0c1cff2886000a28",
  "value": {
    "rev": "3-24140df2569fe30b23cabd0dea6e2290"
  },
  "doc": {
    "_id": "64053f72f8078c0d0c1cff2886000a28",
    "_rev": "3-24140df2569fe30b23cabd0dea6e2290",
    "name": "Siddhat Bhagat",
    "email": "siddhant.bhagat2022@vitstudent.ac.in",
    "phone": "9876543210",
    "address": {
      "street": "Katpadi",
      "city": "Vellore",
      "state": "Tamil Nadu",
      "zip": "632014"
    }
  }
}
```

```
id "64053f72f8078c0d0c1cff28860044d6"

{
  "id": "64053f72f8078c0d0c1cff28860044d6",
  "key": "64053f72f8078c0d0c1cff28860044d6",
  "value": {
    "rev": "2-1929a86bbe21167f3e5dbab6597220f8"
  },
  "doc": {
    "_id": "64053f72f8078c0d0c1cff28860044d6",
    "_rev": "2-1929a86bbe21167f3e5dbab6597220f8",
    "name": "Cristiano Ronaldo",
    "email": "ronaldo.bhagat2022@vitstudent.ac.in",
    "phone": "8876543210",
    "address": {
      "street": "Judges Colony",
      "city": "Gaya",
      "state": "Bihar",
      "zip": "832014"
    }
  }
}
```

## 24) DISPLAYING THE NEW ADDED VALUE IN THE DATABASE JSON FORMAT

```
{
  {
    "id": "64053f72f8078c0d0c1cff2886009503",
    "key": "64053f72f8078c0d0c1cff2886009503",
    "value": {
      "name": "Spider Man",
      "email": "spideyjj@gmail.com"
    },
    "doc": {
      "_id": "64053f72f8078c0d0c1cff2886009503",
      "_rev": "1-548f0295f992c750272aace43e562b90",
      "name": "Spider Man",
      "email": "spideyjj@gmail.com"
    }
  }
}
```