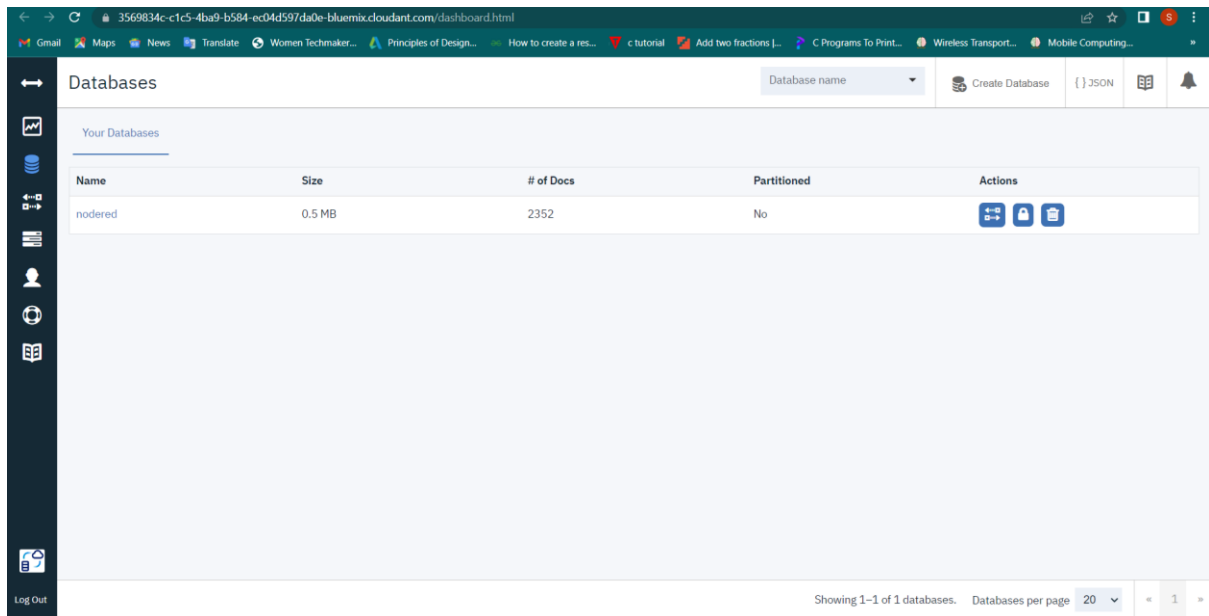


SPRINT - 3

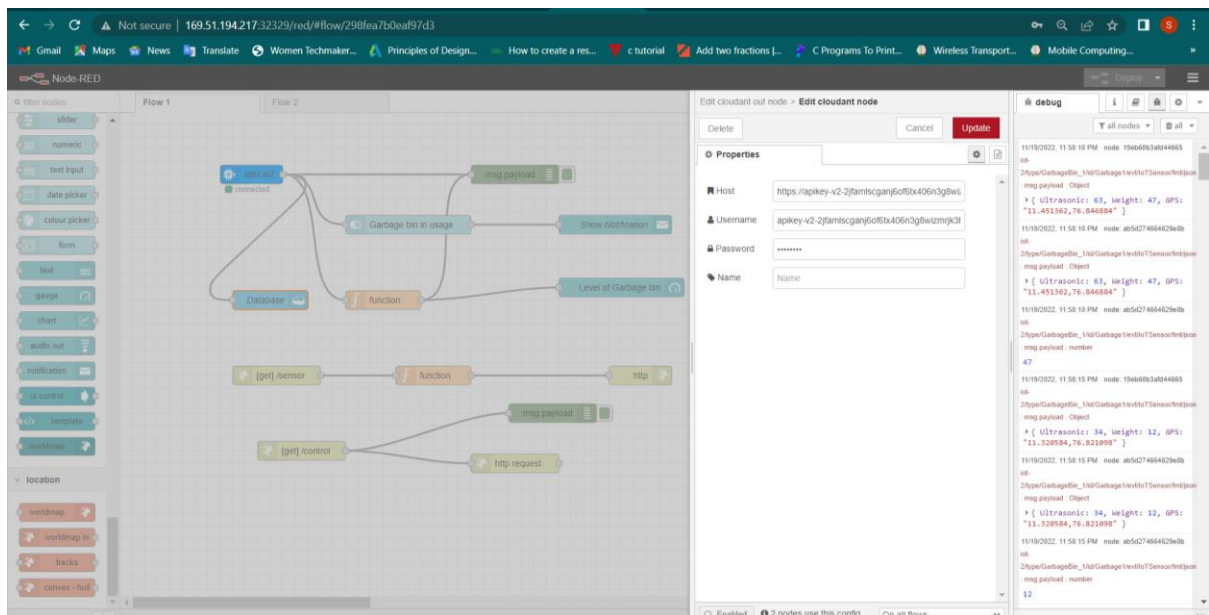
IBM Cloudant creation and Node-Red connection to IBM Cloudant

Date	15 November 2022
Project Name	Smart Waste Management System for Metropolitan Cities
Project ID	PNT2022TMID03917

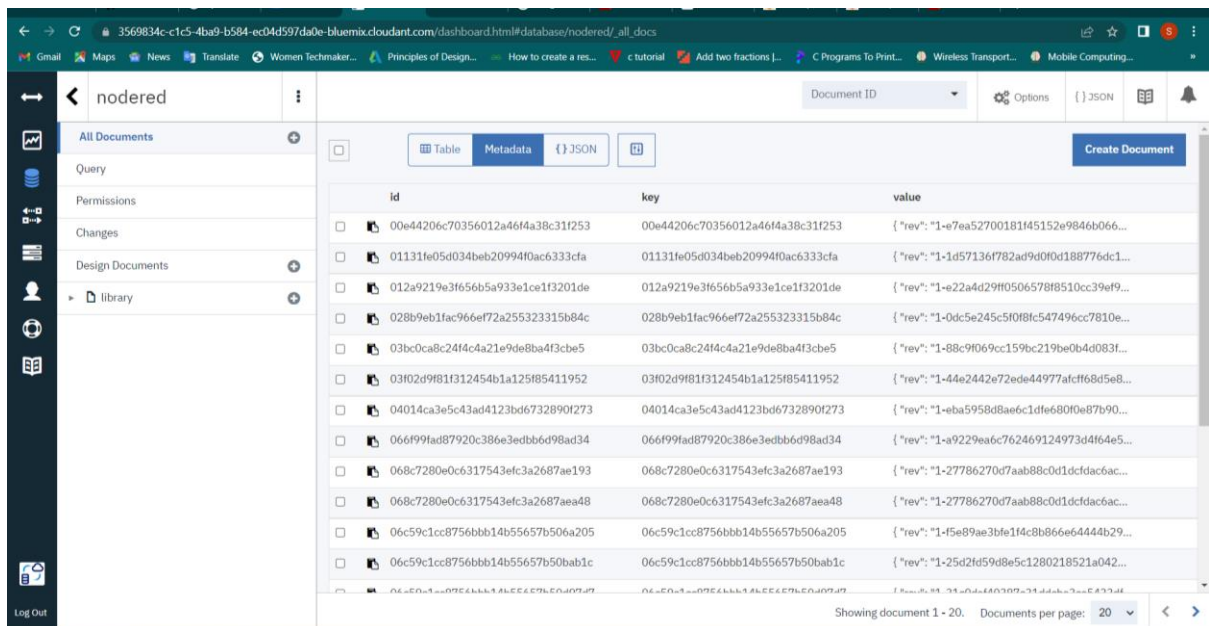
Step 1: Created the database cloudant “nodered” for data storage



Step 2: Database connection with nodered using URL, USERNAME & PASSWORD



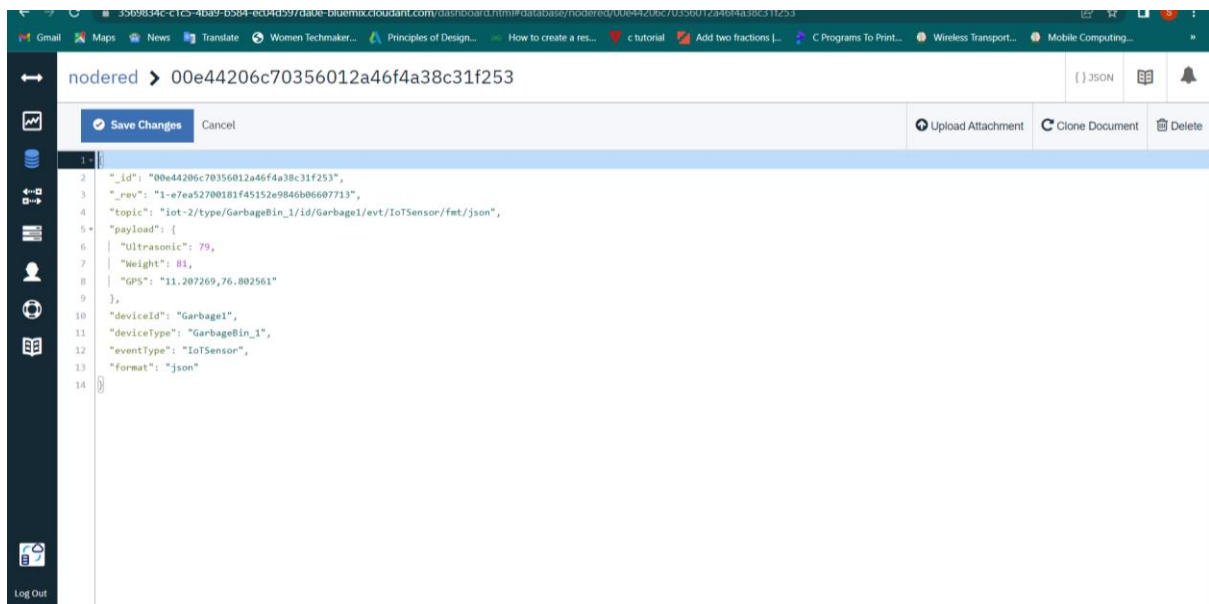
Step 3: Once the node-red is connected with database it displays the data in the cloudant database



The screenshot shows the IBM Cloudant dashboard interface. On the left, there's a sidebar with navigation options like 'All Documents', 'Query', 'Permissions', 'Changes', 'Design Documents', and 'Library'. The main area displays a table of documents. The table has three columns: 'id', 'key', and 'value'. Each row represents a document stored in the database, with its unique ID, key, and the JSON value stored within it. The documents are listed in a table format, showing their IDs, keys, and the JSON values stored within them. The values are truncated in the screenshot.

id	key	value
00e44206c70356012a46f4a38c31f253	00e44206c70356012a46f4a38c31f253	{ "rev": "1-e7ea52700181f45152e9846b066...
01131fe05d034beb20994f0ac6333cfa	01131fe05d034beb20994f0ac6333cfa	{ "rev": "1-1d57136f782ad9d0fd188776dc1...
012a9219e3f656b5a933e1ce1f3201de	012a9219e3f656b5a933e1ce1f3201de	{ "rev": "1-e22a4d29f0506578f8510cc39ef9...
028b9eb1fac966ef72a255323315b84c	028b9eb1fac966ef72a255323315b84c	{ "rev": "1-0dc5e245c5f0f8fc547496cc7810e...
03bc0ca8c24f4c4a21e9de8ba4f3cbe5	03bc0ca8c24f4c4a21e9de8ba4f3cbe5	{ "rev": "1-88c9f069cc159bc219be0b4d083f...
03f02d9f81f312454b1a125f85411952	03f02d9f81f312454b1a125f85411952	{ "rev": "1-44e2442e72ede44977afcf68d5e8...
04014ca3e5c43ad4123bd6732890f273	04014ca3e5c43ad4123bd6732890f273	{ "rev": "1-eba5958d8a6ec1dfe680f0e87b90...
066f99fad87920c386e3edbb6d98ad34	066f99fad87920c386e3edbb6d98ad34	{ "rev": "1-a9229eae6c762469124973d4f64e5...
068c7280e0c6317543efc3a2687ae193	068c7280e0c6317543efc3a2687ae193	{ "rev": "1-27786270d7aab88c0d1dcfdac6ac...
068c7280e0c6317543efc3a2687aea48	068c7280e0c6317543efc3a2687aea48	{ "rev": "1-27786270d7aab88c0d1dcfdac6ac...
06c59c1cc8756bbb14b55657b506a205	06c59c1cc8756bbb14b55657b506a205	{ "rev": "1-f5e89ae3bfe1f4c8b86e6444b29...
06c59c1cc8756bbb14b55657b50bab1c	06c59c1cc8756bbb14b55657b50bab1c	{ "rev": "1-25d2fd59d8e5c1280218521a042...

Step 4: Data is stored in JSON format



The screenshot shows the IBM Cloudant dashboard interface. The top bar displays the database name 'nodered' and the document ID '00e44206c70356012a46f4a38c31f253'. Below the top bar, there's a 'Save Changes' button and a 'Cancel' button. The main area displays the JSON format of the document. The JSON is a nested object with a 'payload' property containing an 'ultrasonic' property with a value of 79, a 'weight' property with a value of 81, and a 'gps' property with a value of '11.207269,76.802561'. The document also has a 'deviceId' property with a value of 'Garbage1', a 'deviceType' property with a value of 'GarbageIn_1', an 'eventType' property with a value of 'IoT Sensor', and a 'format' property with a value of 'json'.

```
1 {}
2 {
3   "_id": "00e44206c70356012a46f4a38c31f253",
4   "_rev": "1-e7ea52700181f45152e9846b06607713",
5   "topic": "iot-2/type/GarbageIn_1/id/Garbage1/evt/IoTSensor/fmt/json",
6   "payload": {
7     | "ultrasonic": 79,
8     | "Weight": 81,
9     | "GPS": "11.207269,76.802561"
10  },
11  "deviceId": "Garbage1",
12  "deviceType": "GarbageIn_1",
13  "eventType": "IoT Sensor",
14  "format": "json"
15 }
```