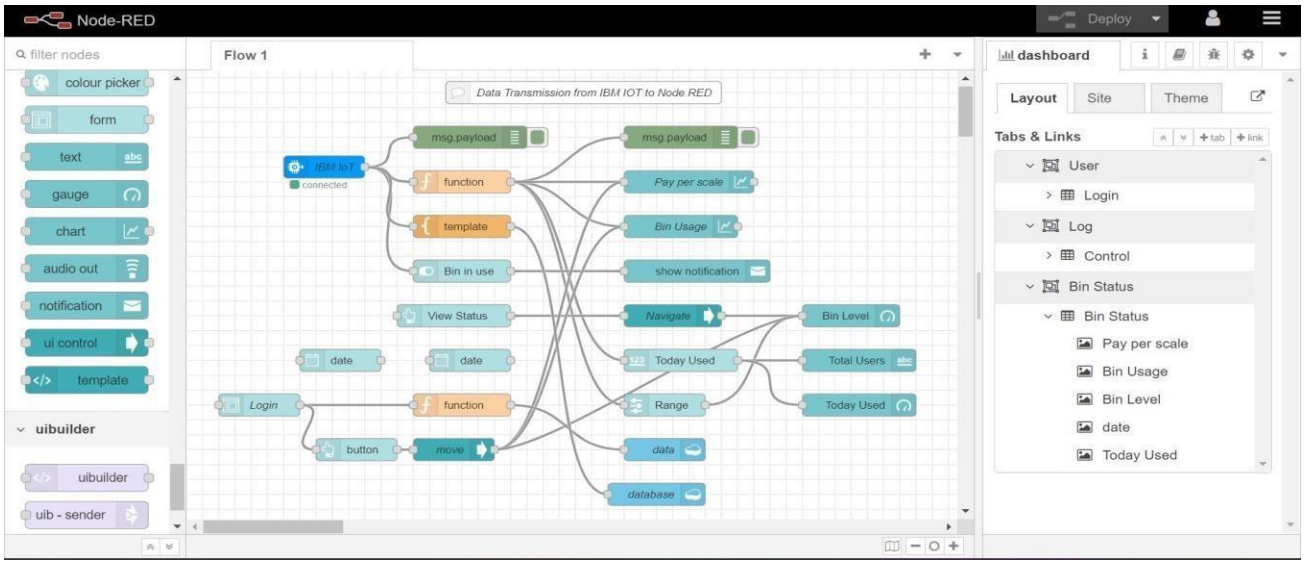
PROJECT DEVELOPMENT PHASE

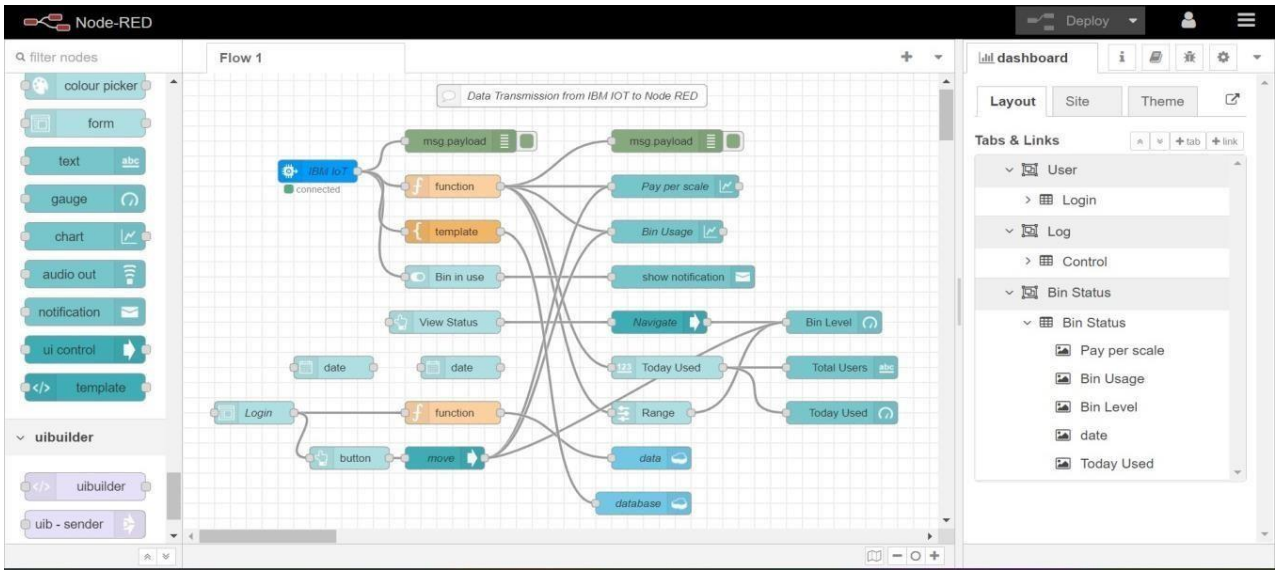
SPRINT 4

Node Red Connection With Wokwi setup to IBM DB in Cloudant

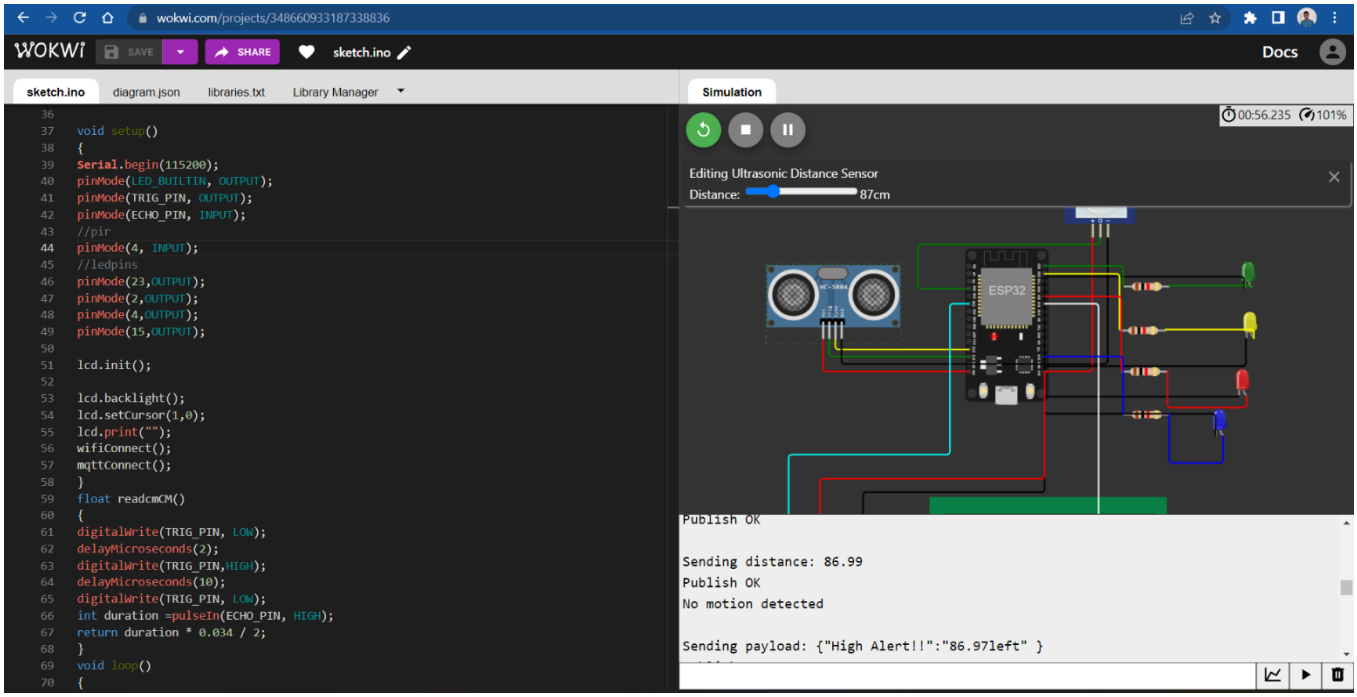
Date	15 November 2022
Team ID	PNT2022TMID04391
Project Name	Smart Waste Management System for Metropolitan Cities
Team Name	HARI PRASATH P MOHAMED ROSHAN M HARSHIT R ROHITH VIGNESH E

1. **Node-RED Connection Design for project model by flowing the detail from one bin to the user for usage of that each bin by showing alert message and data flow from IBM Watson Platform to Node-RED Setup.**

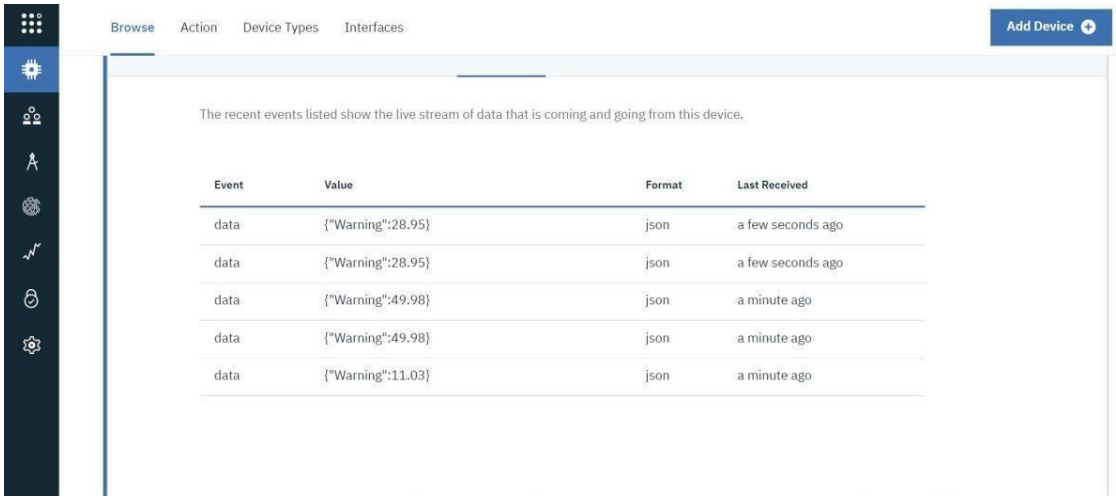



Node-RED
Deploy
filter nodes
Flow 1
dashboard
colour picker
form
text
gauge
chart
audio out
notification
ui control
template
uibuilder
uibuilder
uib - sender
Data Transmission from IBM IOT to Node RED
IBM IoT
connected
msg.payload
function
template
Bin in use
View Status
date
date
Login
function
button
move
msg.payload
Pay per scale
Bin Usage
show notification
Navigate
Today Used
Range
data
database
Bin Level
Total Users
Today Used
Layout
Site
Theme
Tabs & Links
User
Login
Log
Control
Bin Status
Bin Status
Pay per scale
Bin Usage
Bin Level
date
Today Used

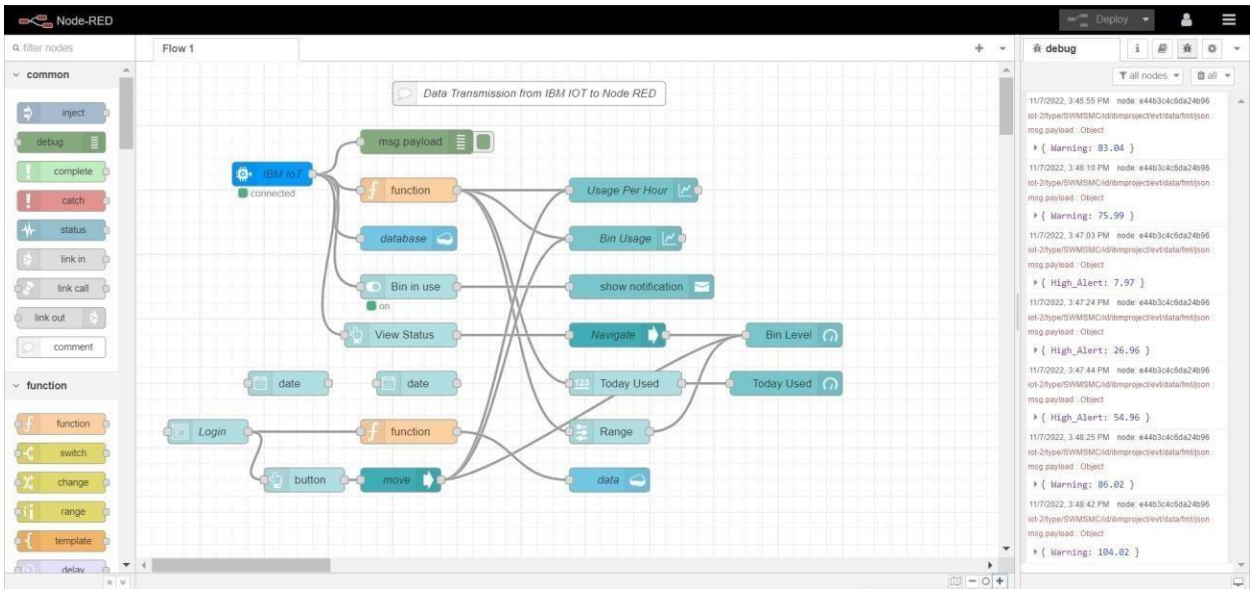
2.Simulate Wokwi Simulator to transmit data from Wokwi account to IBM IOT platform and then to Node Red Setup Dashboard for Detail of project design from each bin to the sensor for user Reference.



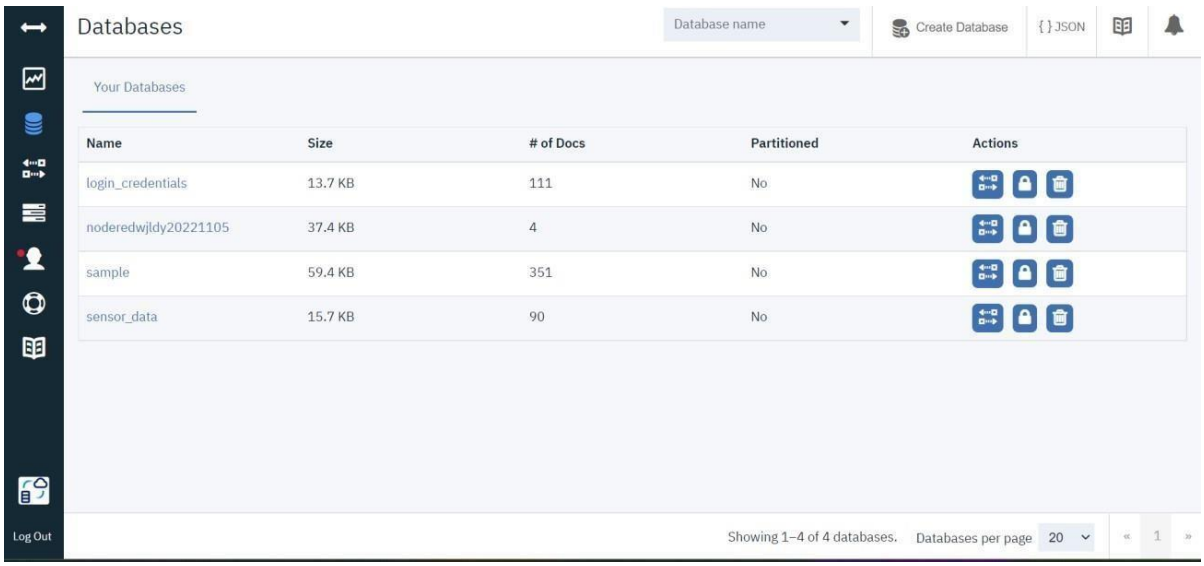
3.Data Values Display to IBM Cloud Account from Wokwi Simulation:

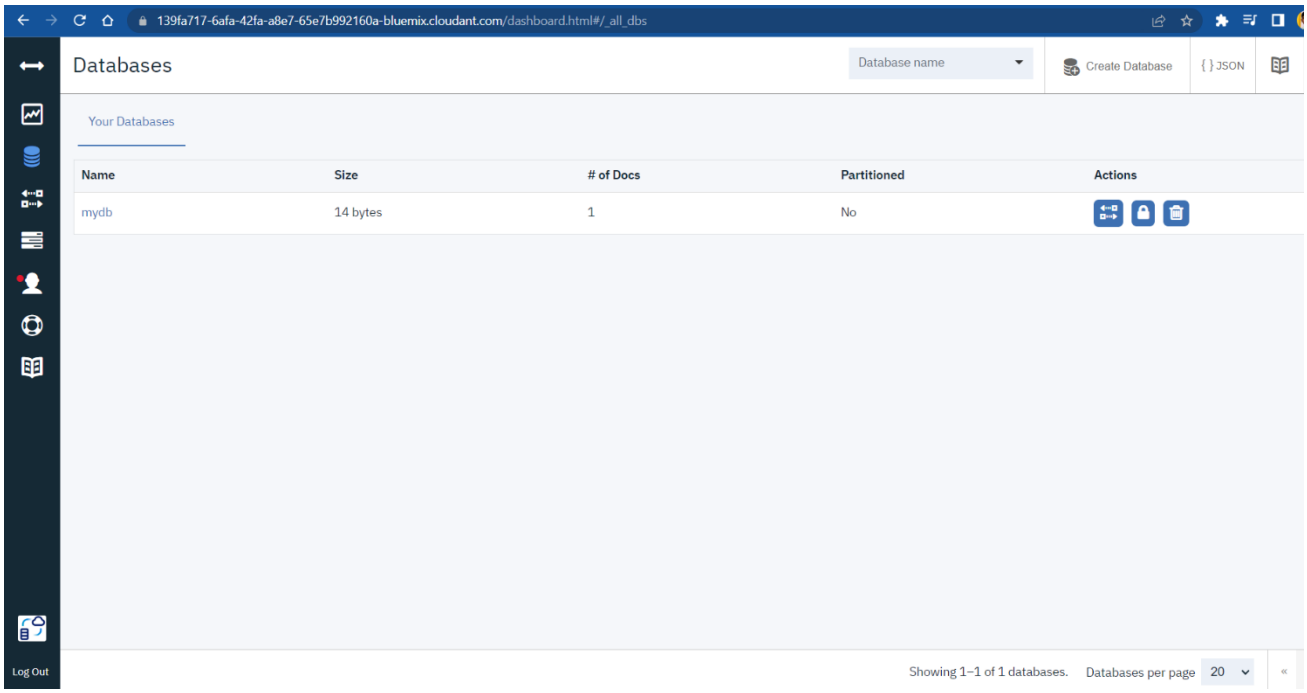


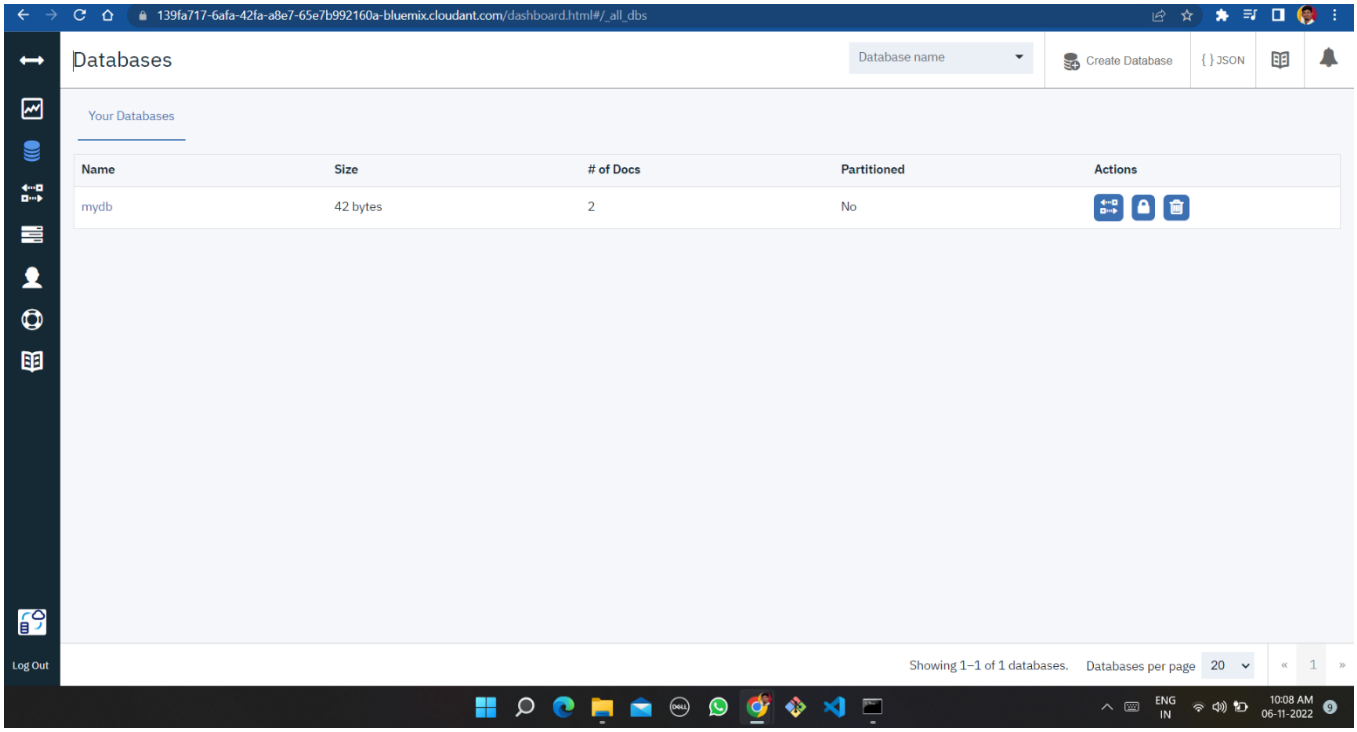
4.Data transfer from IBM Watson IOT platform and wokwi to Node red.

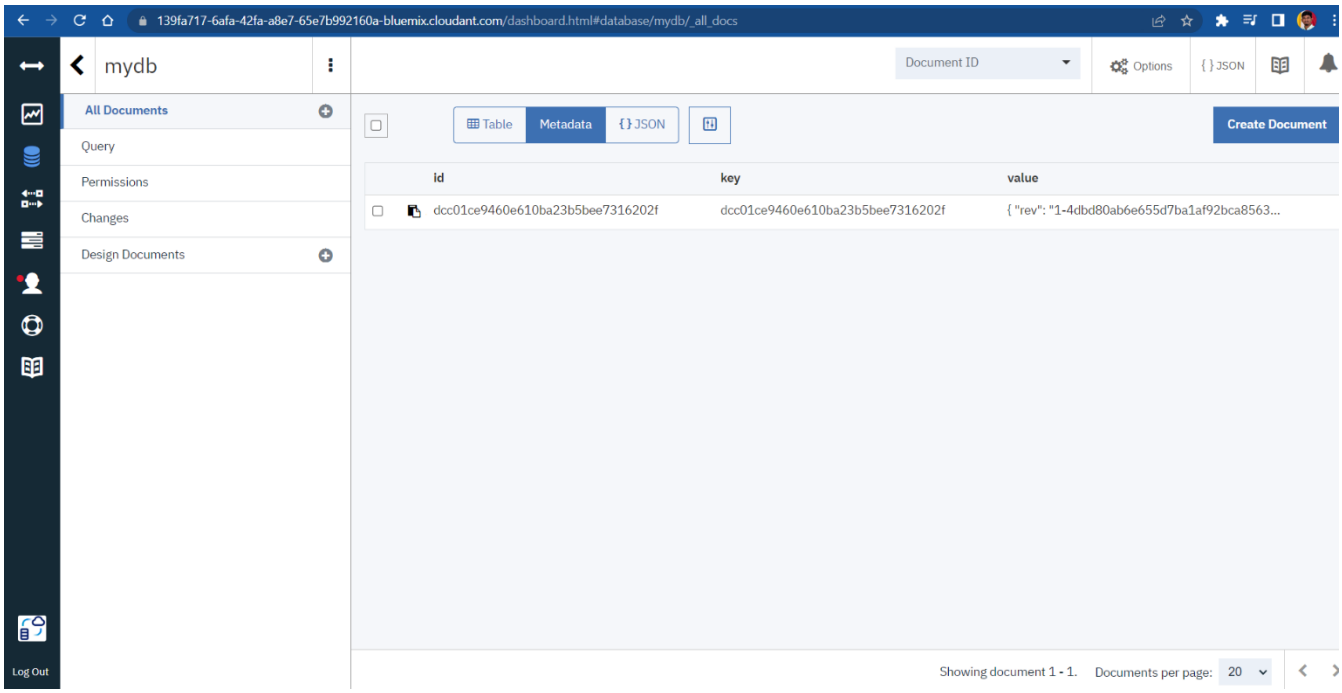


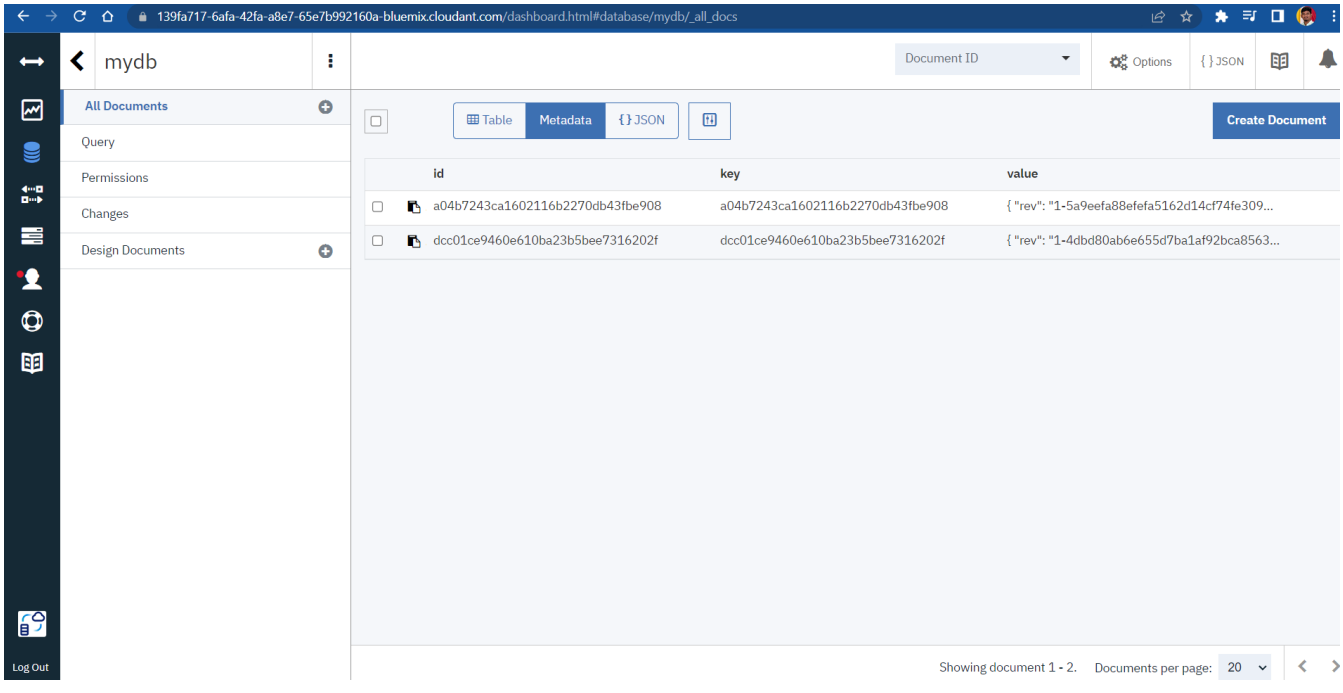
5.Storing database in IBM cloudant DB.

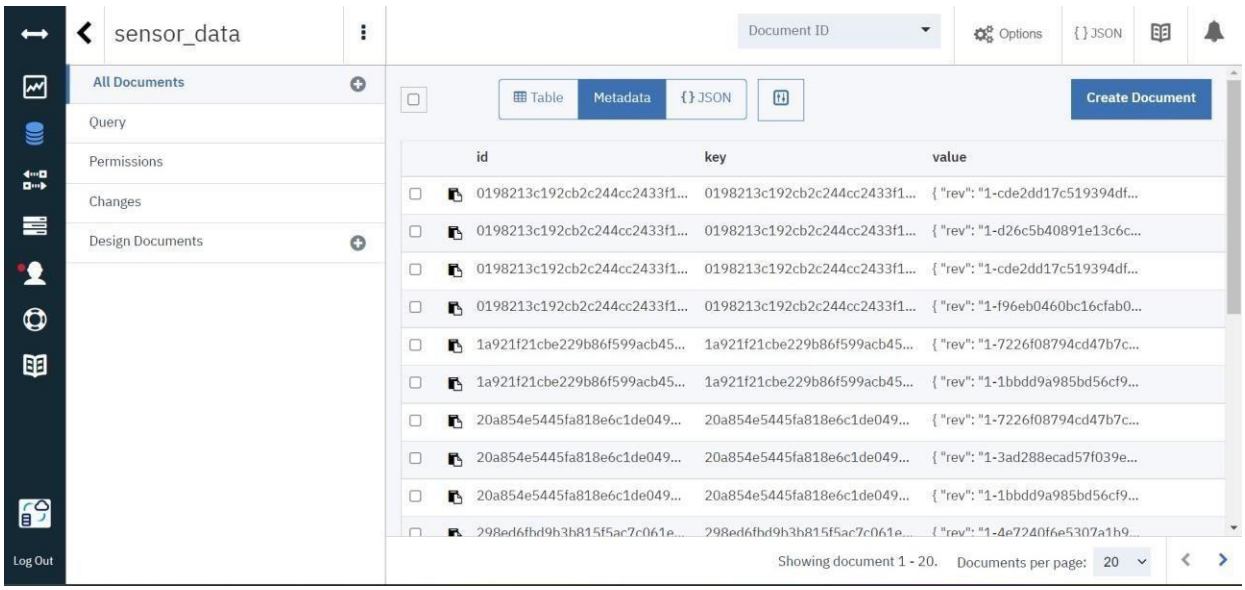



139fa717-6afa-42fa-a8e7-65e7b992160a-bluemix.cloudant.com/dashboard.html#/_all_dbs
Databases
Database name
Create Database
{ } JSON
Your Databases
Name
Size
# of Docs
Partitioned
Actions
mydb
14 bytes
1
No
Log Out
Showing 1–1 of 1 databases.
Databases per page
20

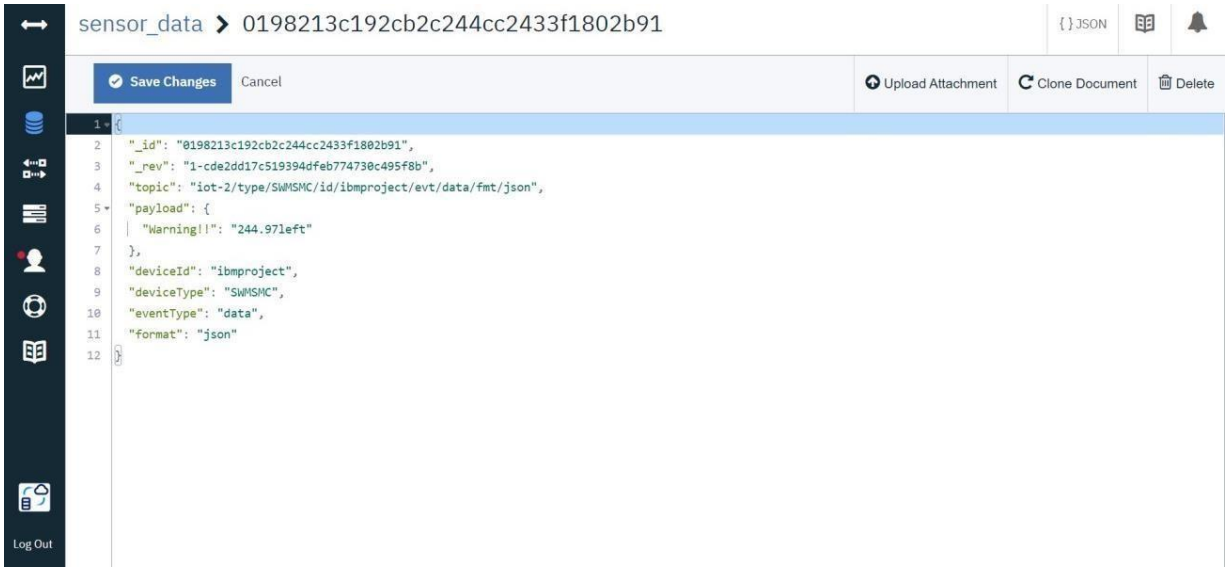

139fa717-6afa-42fa-a8e7-65e7b992160a-bluemix.cloudant.com/dashboard.html#/_all_dbs
Databases
Database name
Create Database
{ } JSON
Your Databases
Name
Size
# of Docs
Partitioned
Actions
mydb
42 bytes
2
No
Log Out
Showing 1–1 of 1 databases.
Databases per page
20
ENG
IN
10:08 AM
06-11-2022

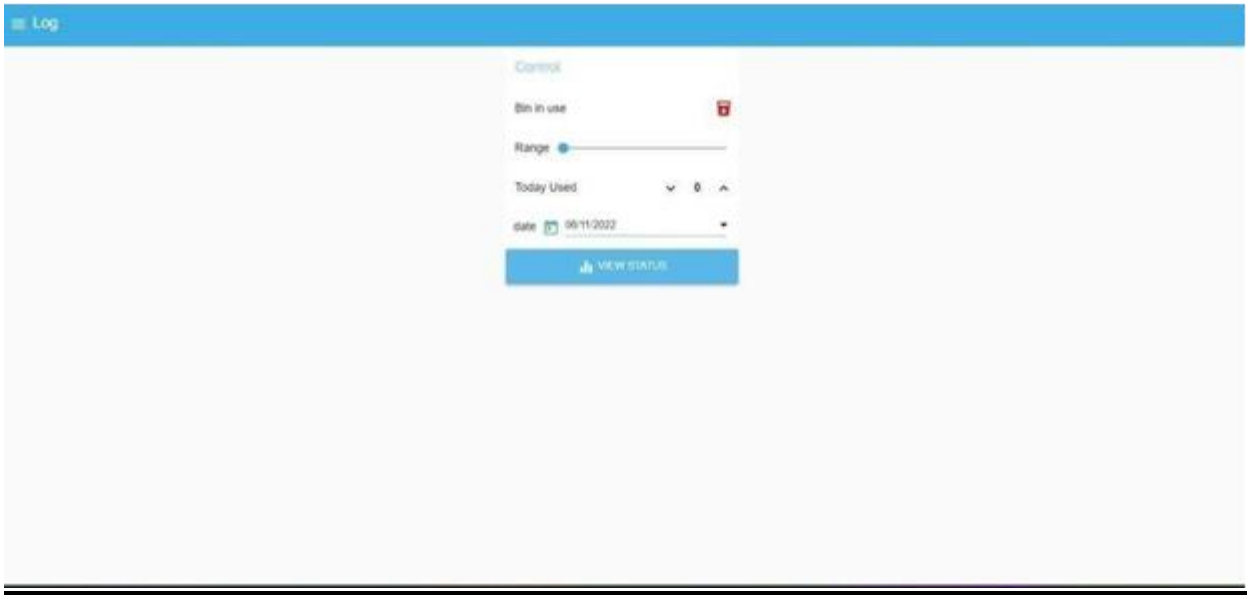

139fa717-6afa-42fa-a8e7-65e7b992160a-bluemix.cloudant.com/dashboard.html#database/mydb/_all_docs
mydb
Document ID
Options
{ } JSON
All Documents
Query
Permissions
Changes
Design Documents
Table
Metadata
{ } JSON
Create Document
id
key
value
dcc01ce9460e610ba23b5bee7316202f
dcc01ce9460e610ba23b5bee7316202f
{ "rev": "1-4dbd80ab6e655d7ba1af92bca8563...
Log Out
Showing document 1 - 1.
Documents per page:
20


139fa717-6afa-42fa-a8e7-65e7b992160a-bluemix.cloudant.com/dashboard.html#database/mydb/_all_docs
mydb
Document ID
Options
{ } JSON
All Documents
Query
Permissions
Changes
Design Documents
Table
Metadata
{ } JSON
Create Document
id
key
value
a04b7243ca1602116b2270db43fbe908
a04b7243ca1602116b2270db43fbe908
{ "rev": "1-5a9eefa88efefa5162d14cf74fe309...
dcc01ce9460e610ba23b5bee7316202f
dcc01ce9460e610ba23b5bee7316202f
{ "rev": "1-4dbd80ab6e655d7ba1af92bca8563...
Log Out
Showing document 1 - 2.
Documents per page:
20



6.Data In JSONformat and Credentials For Wokwi Connection using Node Red Setup:




Log
Control
Bin in use
Range
Today Used
0
date
06/11/2022
VIEW STATUS

Bin Status
Bin Status
Bin Level
Today Used
Bin Level
27
date
06/11/2022
Today Used
27gallons

PYTHON CODE WITH SENSOR CONNECTION IN WOKWI LINK:

https://wokwi.com/projects/348671665493770836