INTELLIGENT WATER DISTRIBUTION & MONITORING SYSTEM PROJECT SCREENSHOTS

Prepared by :

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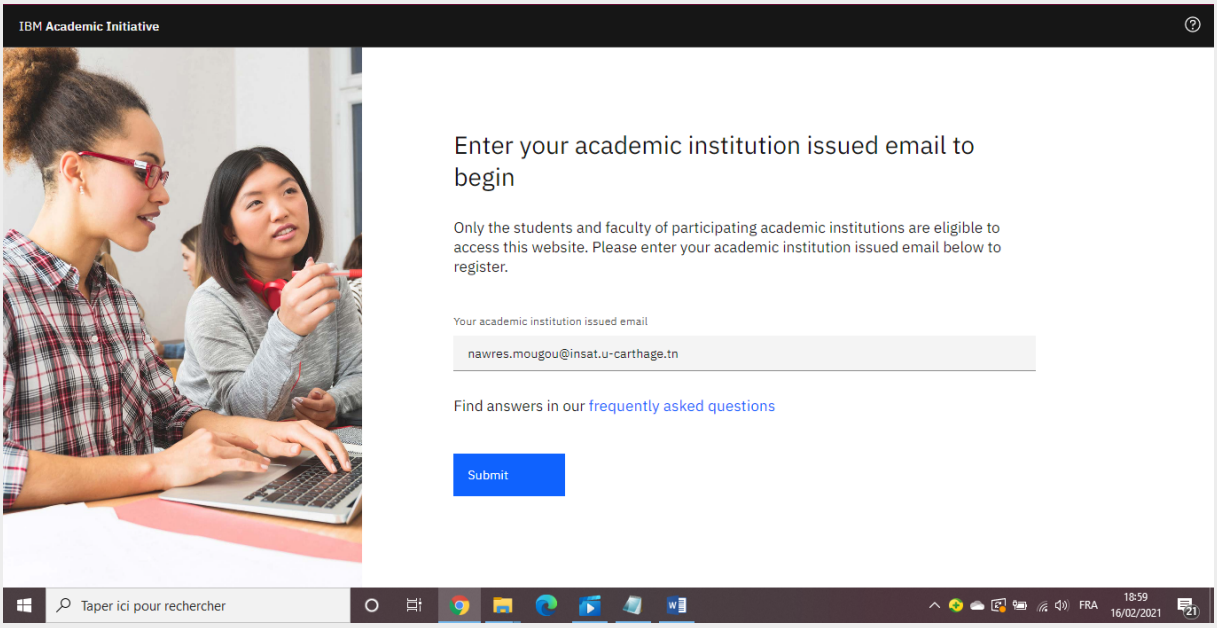
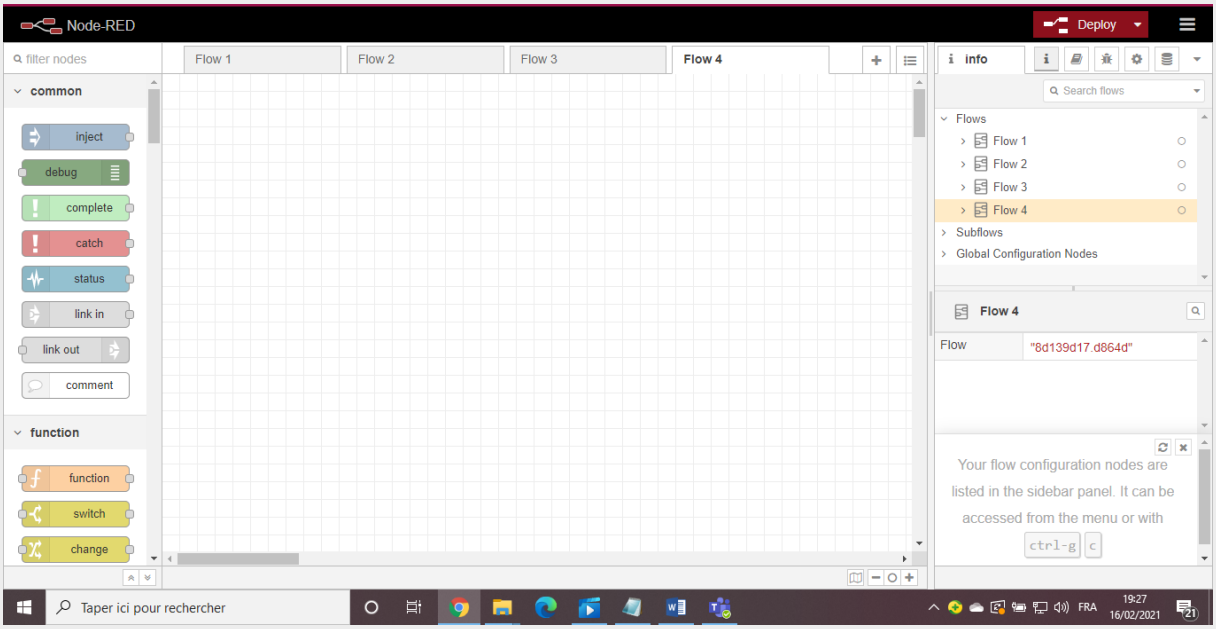
Nawresmougou274@gmail.com

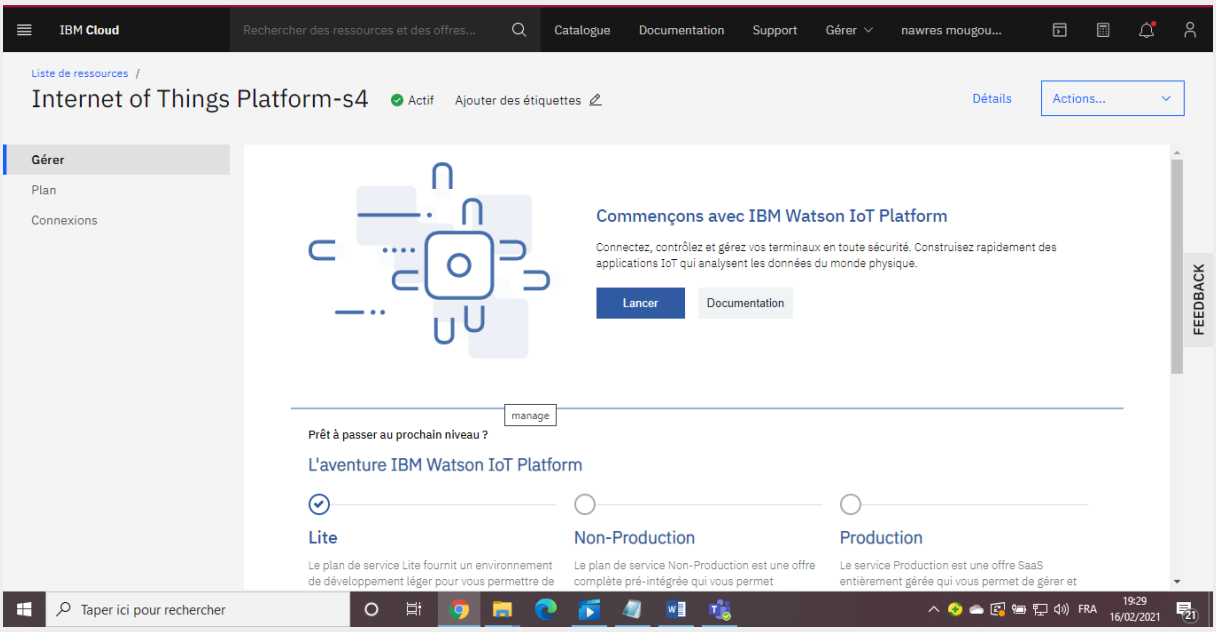
- Ibm academic initiative account :



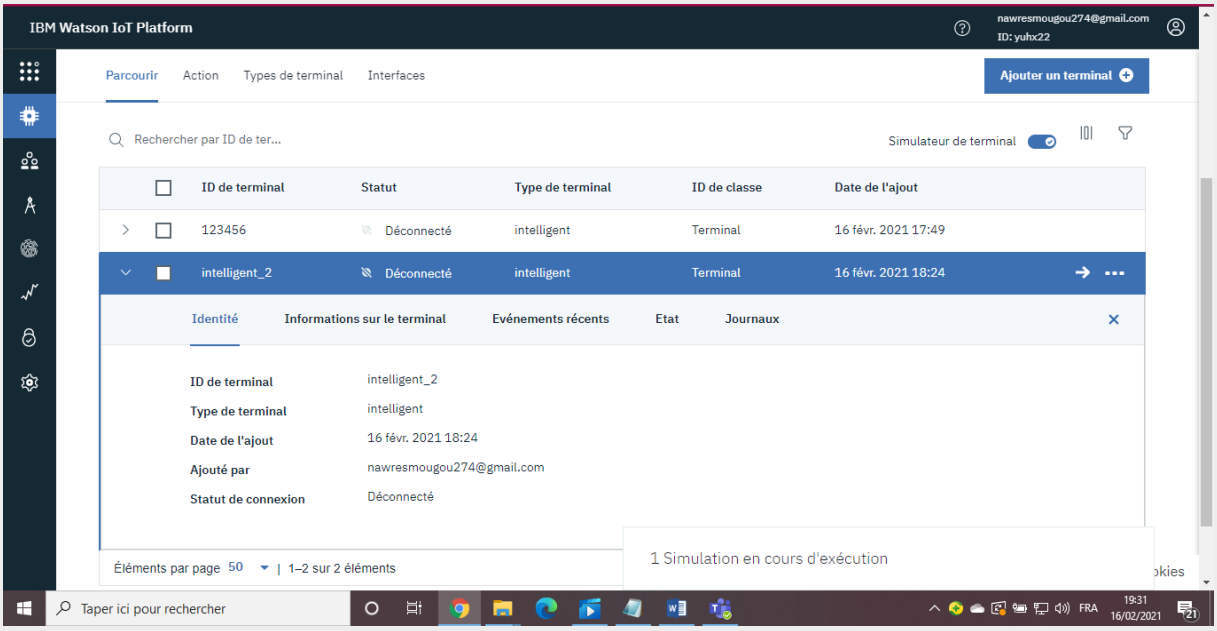
- Create and launch Node-RED instance :



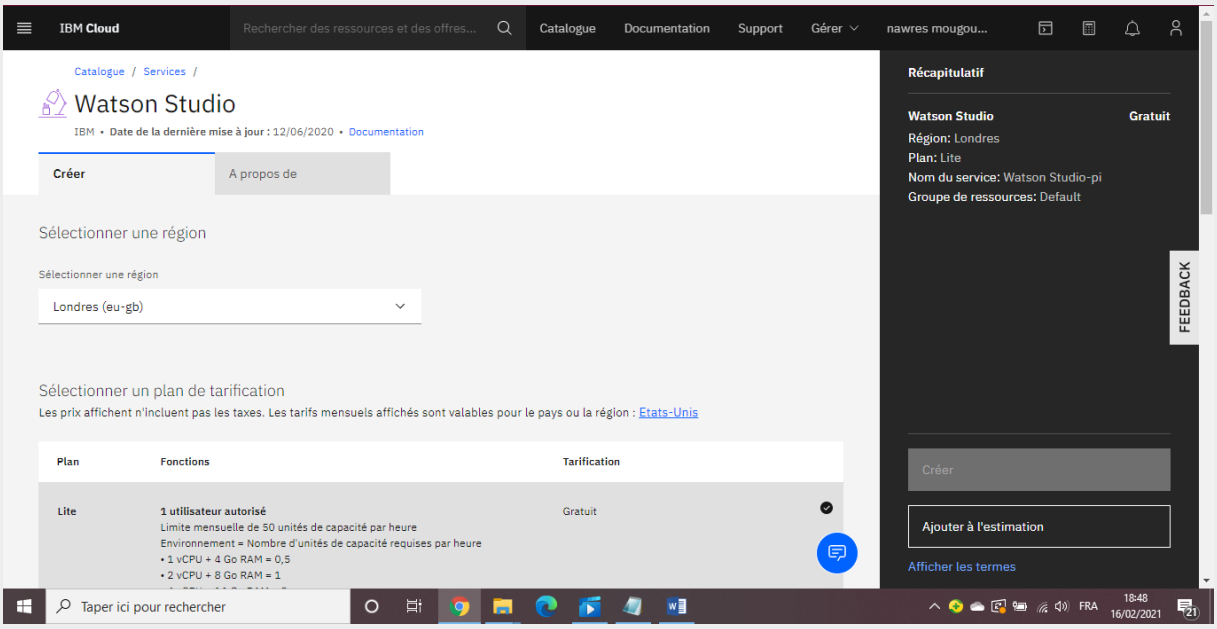
- Create An IBM Watson Iot Platform:



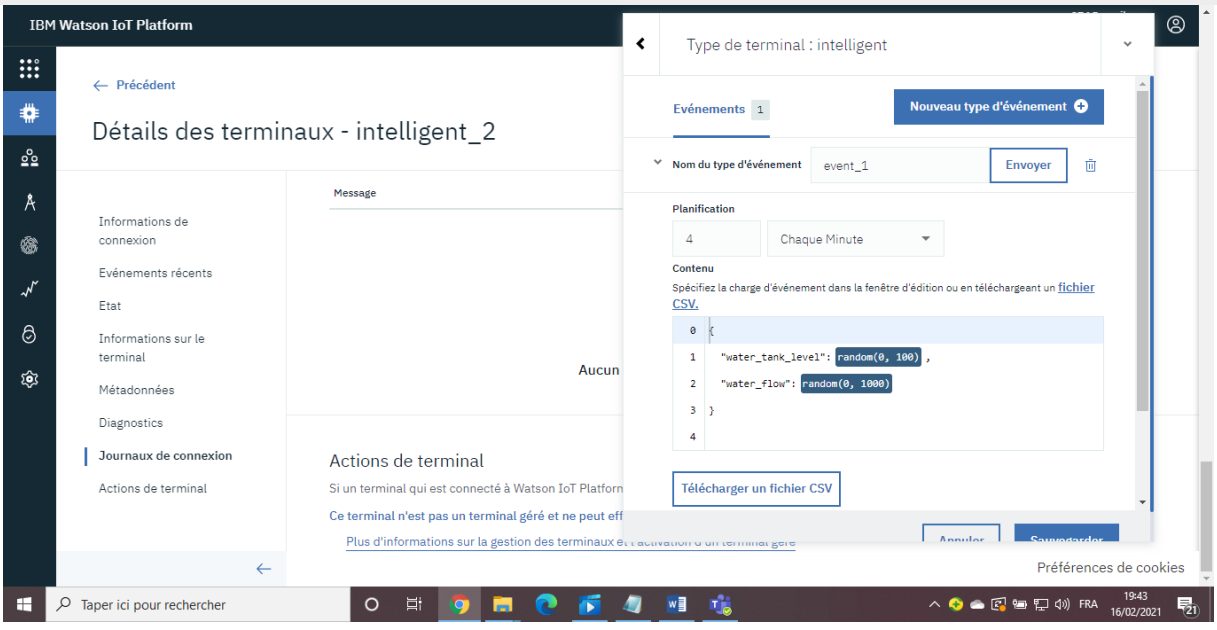
- Configure The Iot Platform :

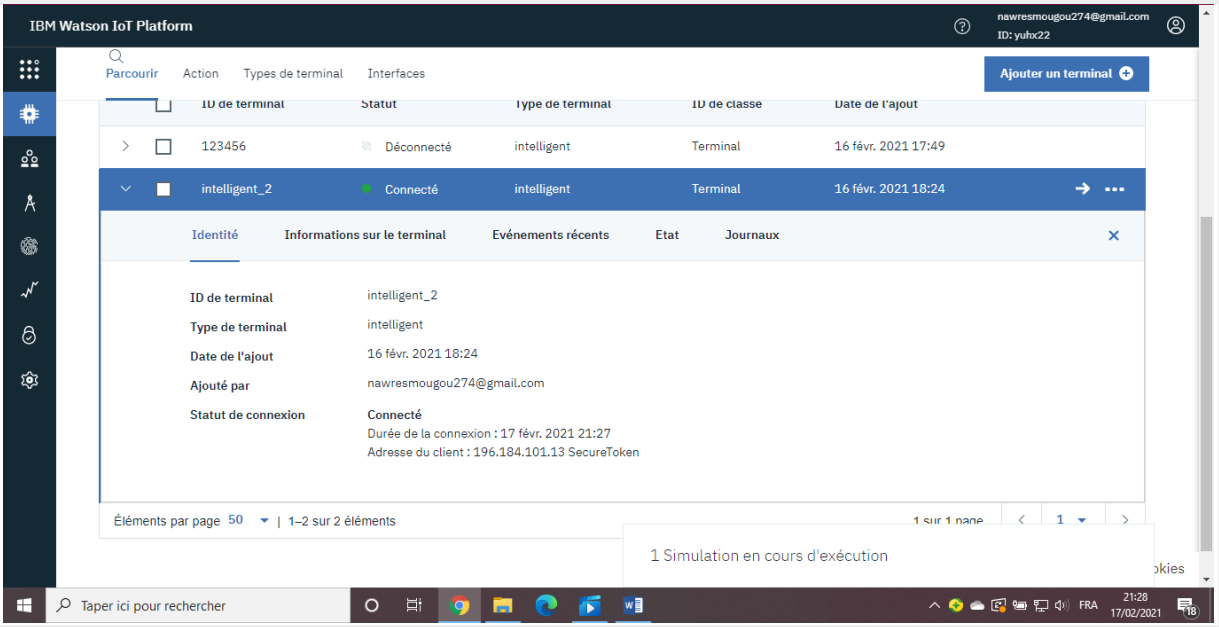


- Download Watson Studio Desktop :

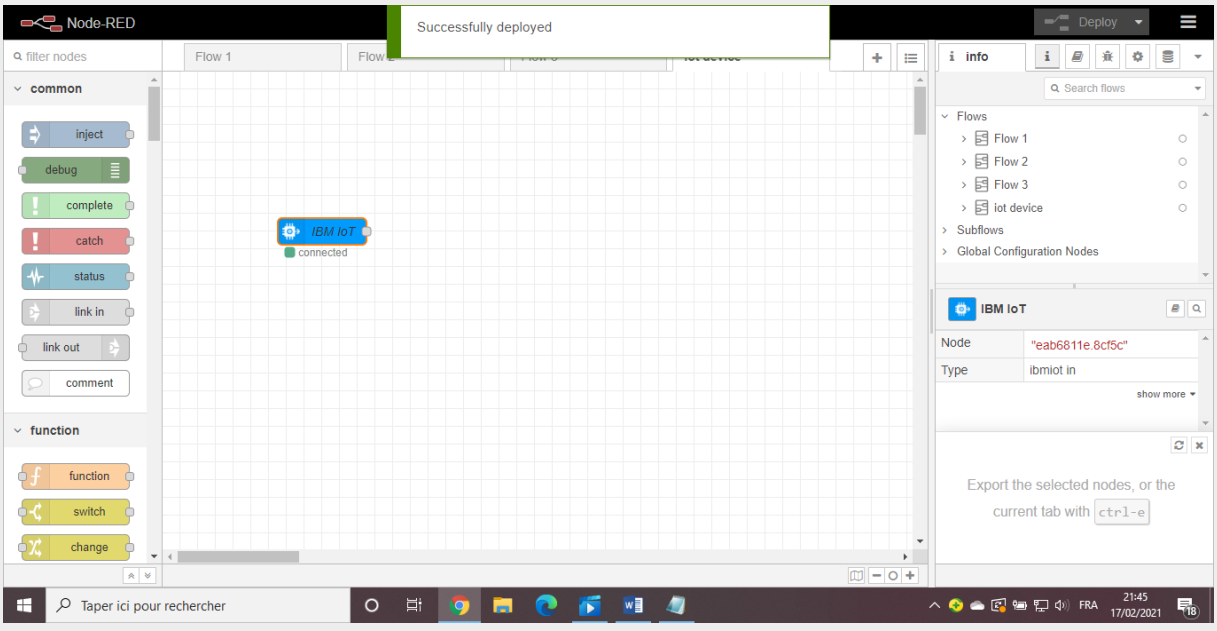


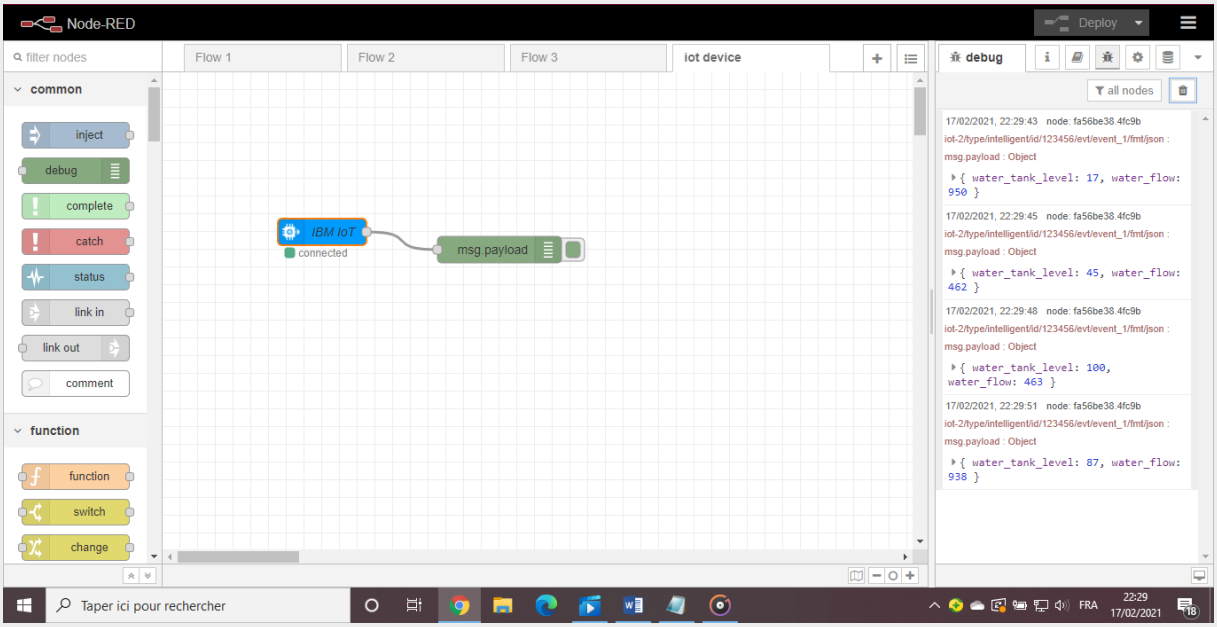
- Configure And Connect The Online Simulator Sensor:

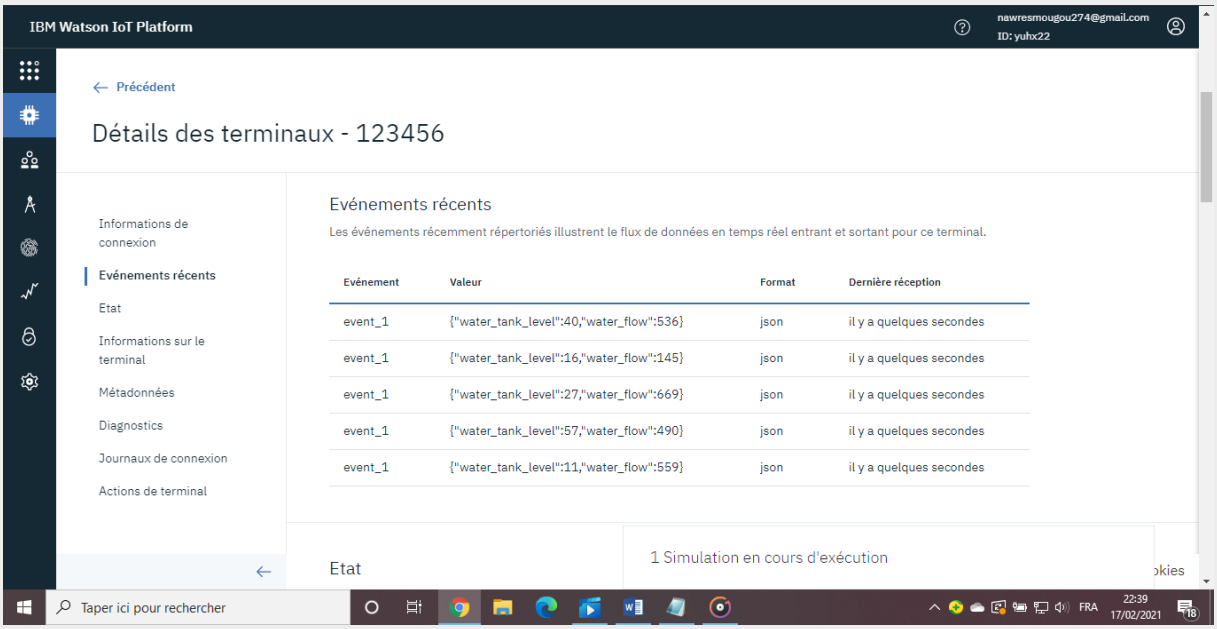




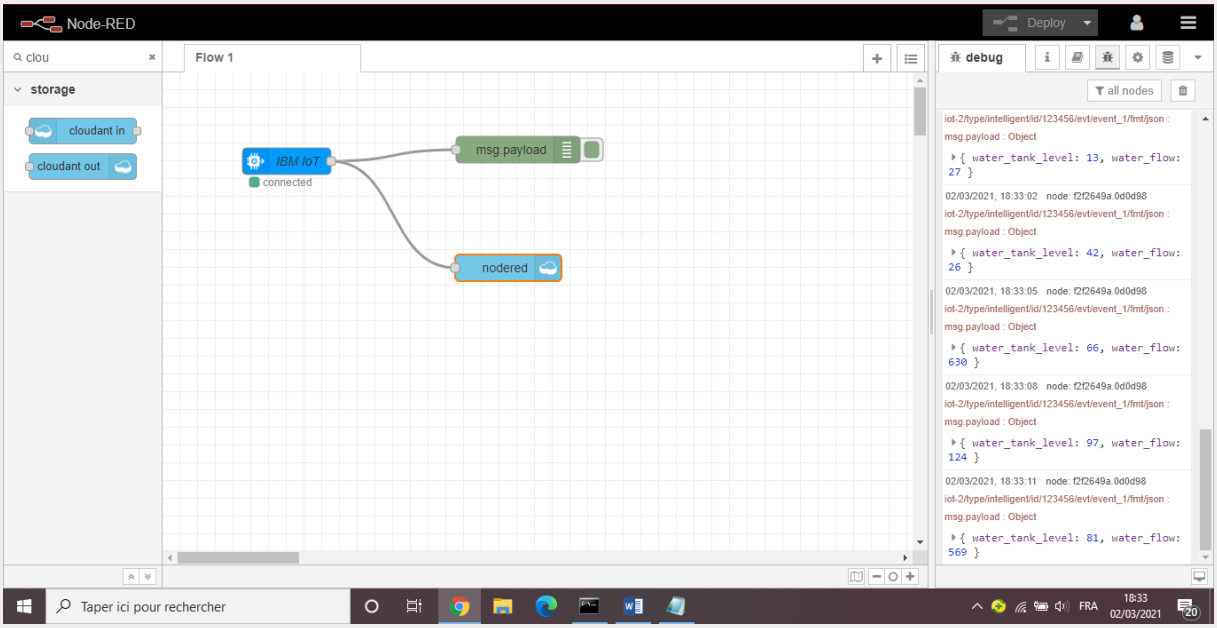
- Create A Node-RED Flow To Get Data From The IBM Device :



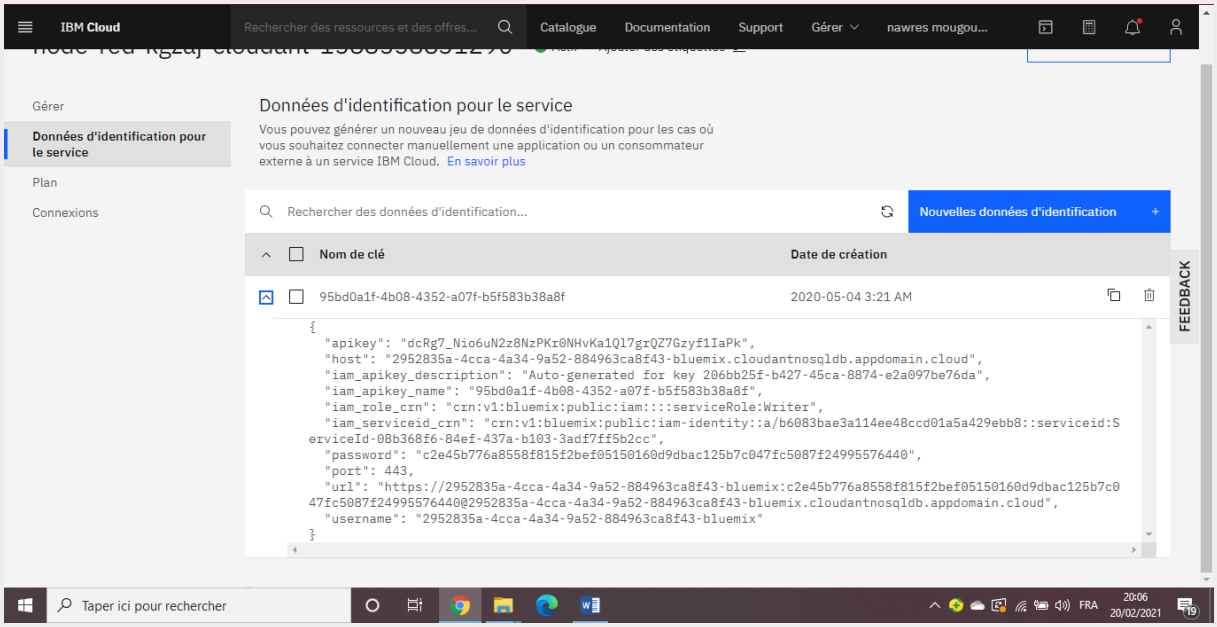

Node-RED
Deploy
filter nodes
Flow 1
Flow 2
Flow 3
iot device
debug
common
inject
debug
complete
catch
status
link in
link out
comment
function
function
switch
change
IBM IoT
connected
msg.payload
all nodes
17/02/2021, 22:29:43 node: fa56be38.4fc9b
iot-2/type/intelligent/id/123456/evt/event_1/fmt/json : msg.payload : Object
{ water_tank_level: 17, water_flow: 950 }
17/02/2021, 22:29:45 node: fa56be38.4fc9b
iot-2/type/intelligent/id/123456/evt/event_1/fmt/json : msg.payload : Object
{ water_tank_level: 45, water_flow: 462 }
17/02/2021, 22:29:48 node: fa56be38.4fc9b
iot-2/type/intelligent/id/123456/evt/event_1/fmt/json : msg.payload : Object
{ water_tank_level: 100, water_flow: 463 }
17/02/2021, 22:29:51 node: fa56be38.4fc9b
iot-2/type/intelligent/id/123456/evt/event_1/fmt/json : msg.payload : Object
{ water_tank_level: 87, water_flow: 938 }
Taper ici pour rechercher
FRA
22:29
17/02/2021

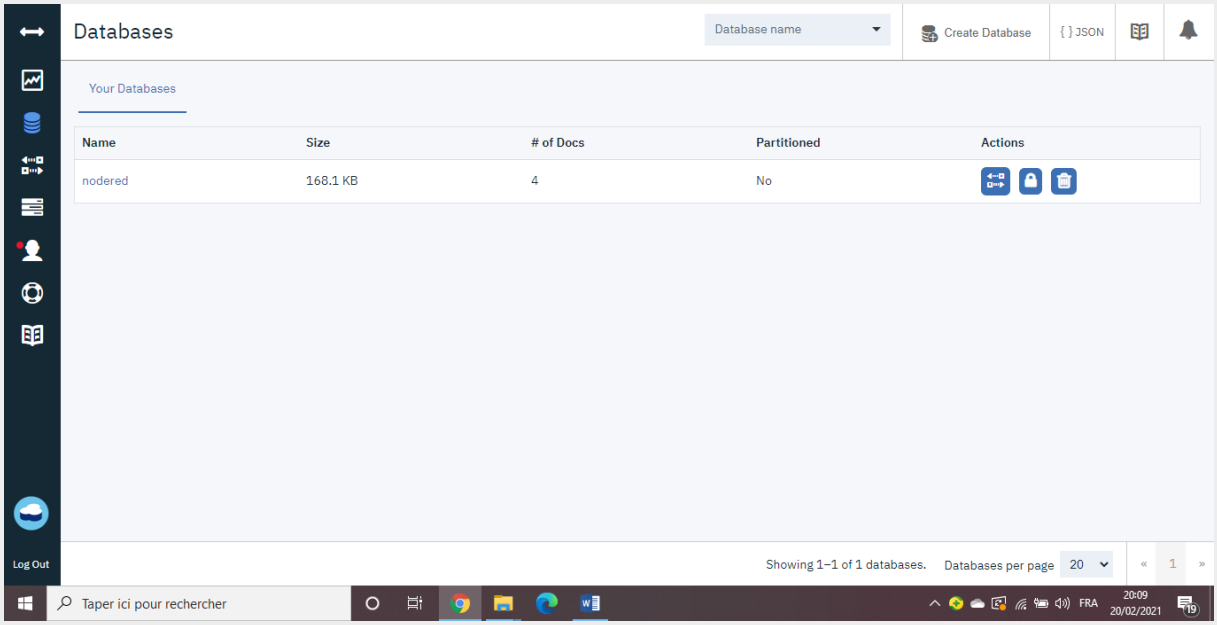

IBM Watson IoT Platform
nawresmougou274@gmail.com
ID: yuhx22
Précédent
Détails des terminaux - 123456
Informations de connexion
Evénements récents
Etat
Informations sur le terminal
Métadonnées
Diagnostics
Journaux de connexion
Actions de terminal
Evénements récents
Les événements récemment répertoriés illustrent le flux de données en temps réel entrant et sortant pour ce terminal.
Evénement
Valeur
Format
Dernière réception
event_1 {"water_tank_level":40,"water_flow":536} json il y a quelques secondes
event_1 {"water_tank_level":16,"water_flow":145} json il y a quelques secondes
event_1 {"water_tank_level":27,"water_flow":669} json il y a quelques secondes
event_1 {"water_tank_level":57,"water_flow":490} json il y a quelques secondes
event_1 {"water_tank_level":11,"water_flow":559} json il y a quelques secondes
Etat
1 Simulation en cours d'exécution
Taper ici pour rechercher
FRA
22:39
17/02/2021

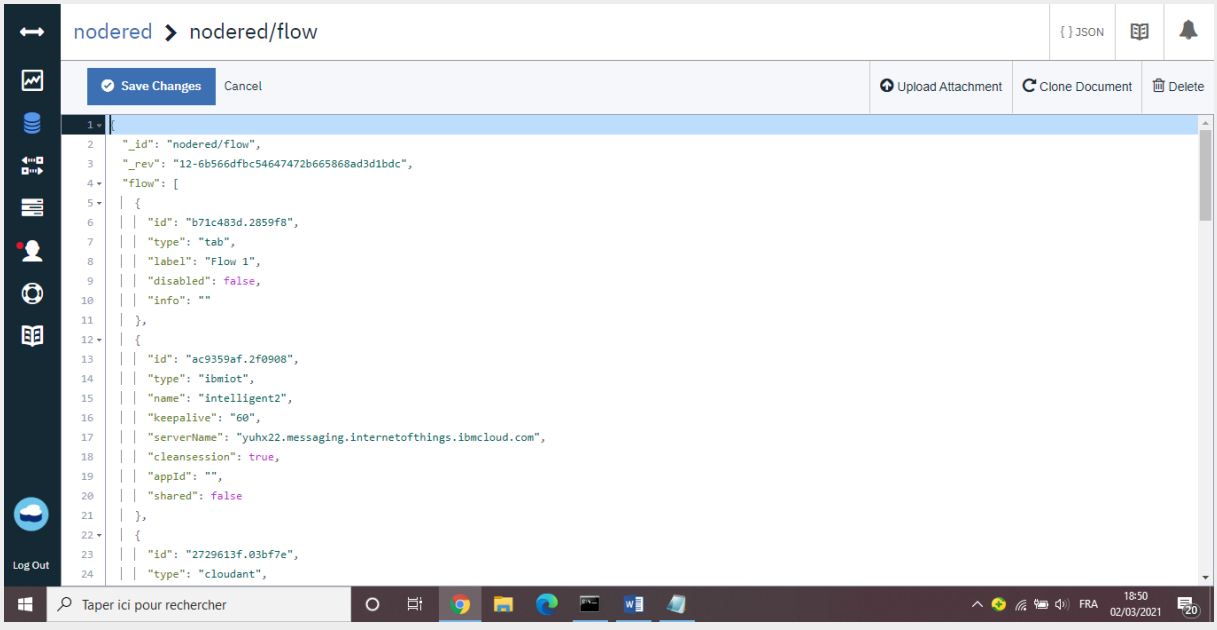
- Configure the node-RED flow to get the data received from IBM Iot device in cloudant DB:



- viewing credential information :




Databases
Database name
Create Database
{ } JSON
Your Databases
Name
Size
# of Docs
Partitioned
Actions
nodered
168.1 KB
4
No
Log Out
Showing 1–1 of 1 databases.
Databases per page
20
Taper ici pour rechercher
FRA
20:09
20/02/2021


nodered > nodered/flow
{ } JSON
Save Changes
Cancel
Upload Attachment
Clone Document
Delete
{
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"_rev": "12-6b566dfbc54647472b665868ad3d1bdc",
"flow": [
{
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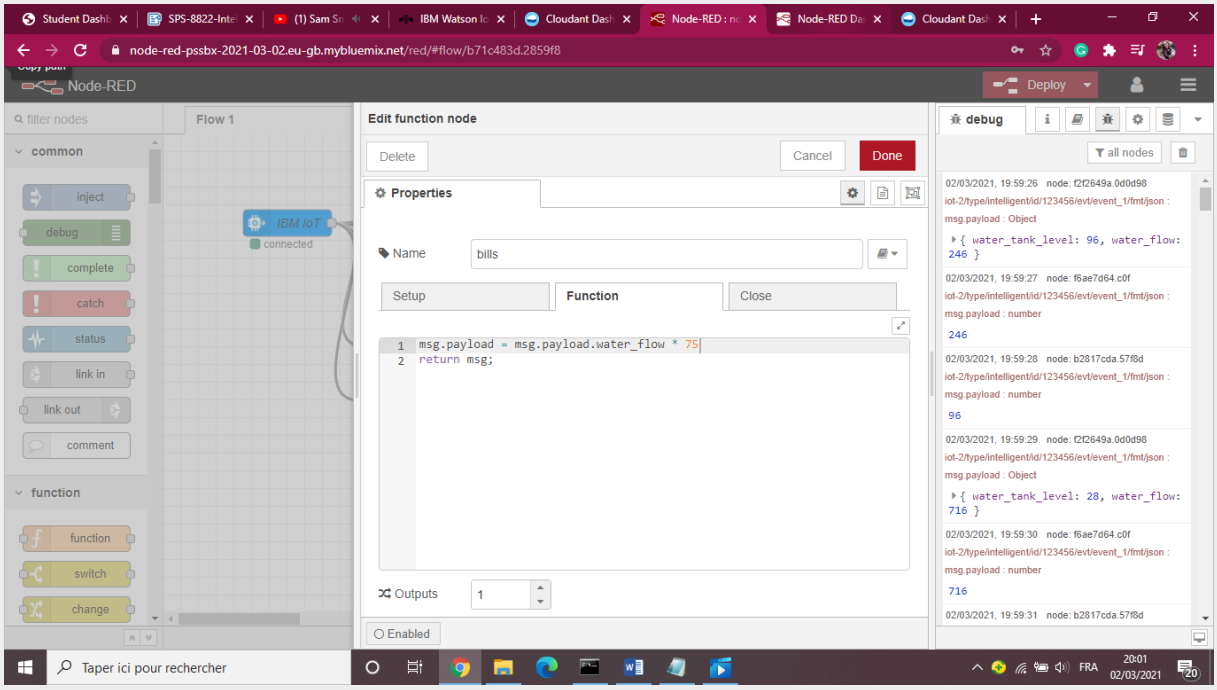
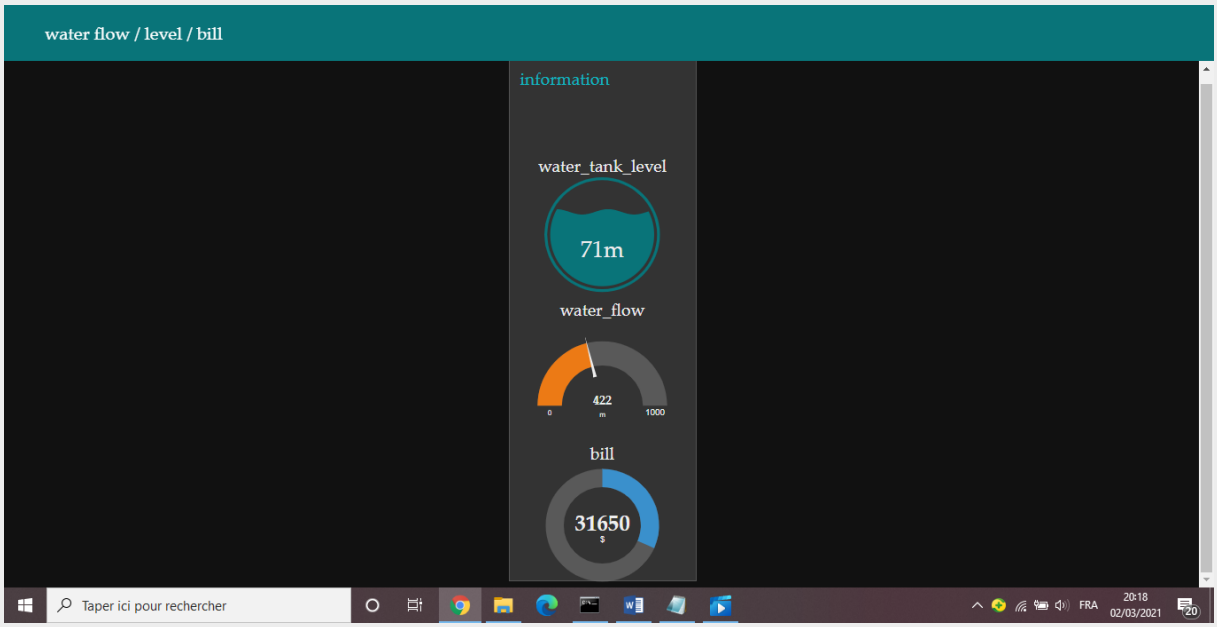
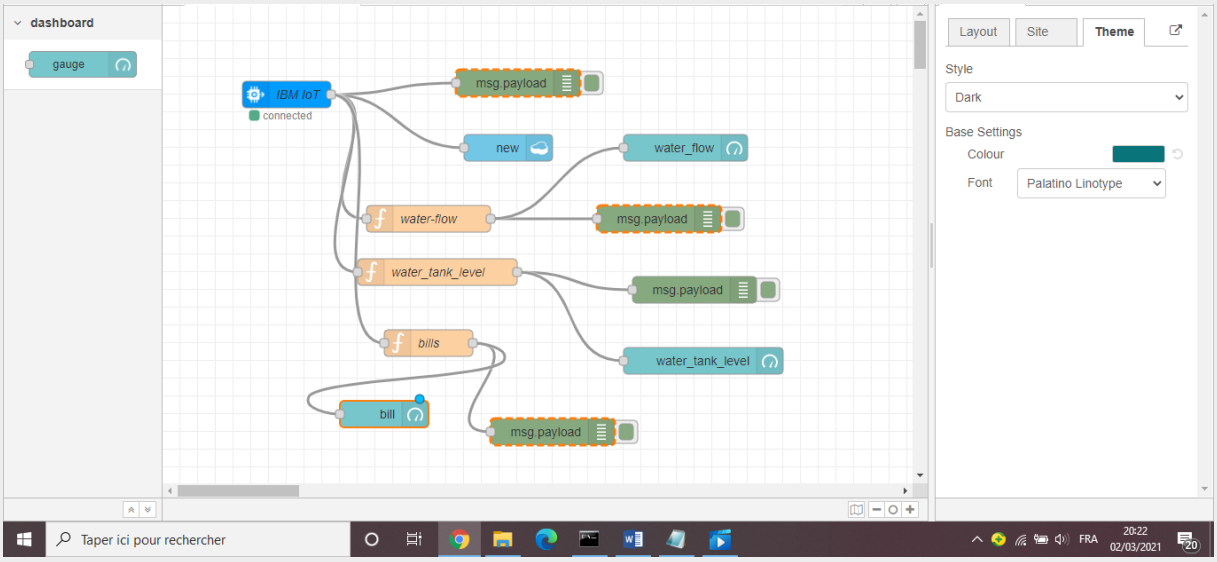
"label": "Flow 1",
"disabled": false,
"info": ""
},
{
"id": "ac9359af.2f0908",
"type": "ibmiot",
"name": "intelligent2",
"keepalive": "60",
"serverName": "yuhx22.messaging.internetofthings.ibmcloud.com",
"cleansession": true,
"appId": "",
"shared": false
},
{
"id": "2729613f.03bf7e",
"type": "cloudant",
Log Out
Taper ici pour rechercher
FRA
18:50
02/03/2021

- Configure The Node-Red To Retrieve The Monthly Flowrate From Cloudant Db And Calculate Bills:

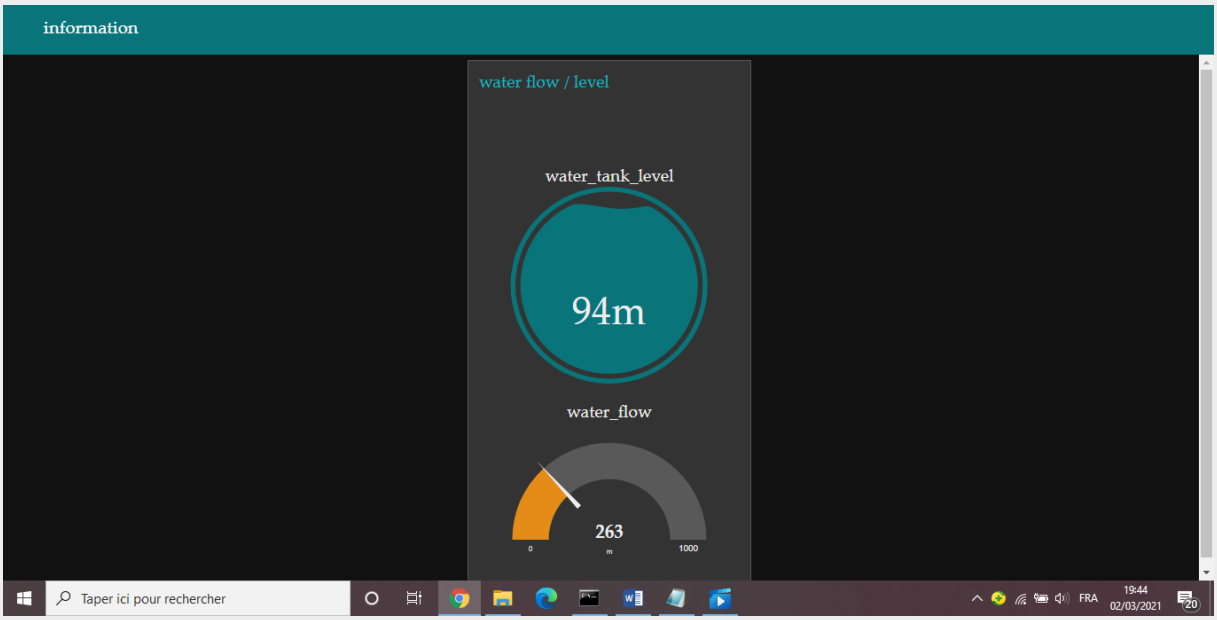


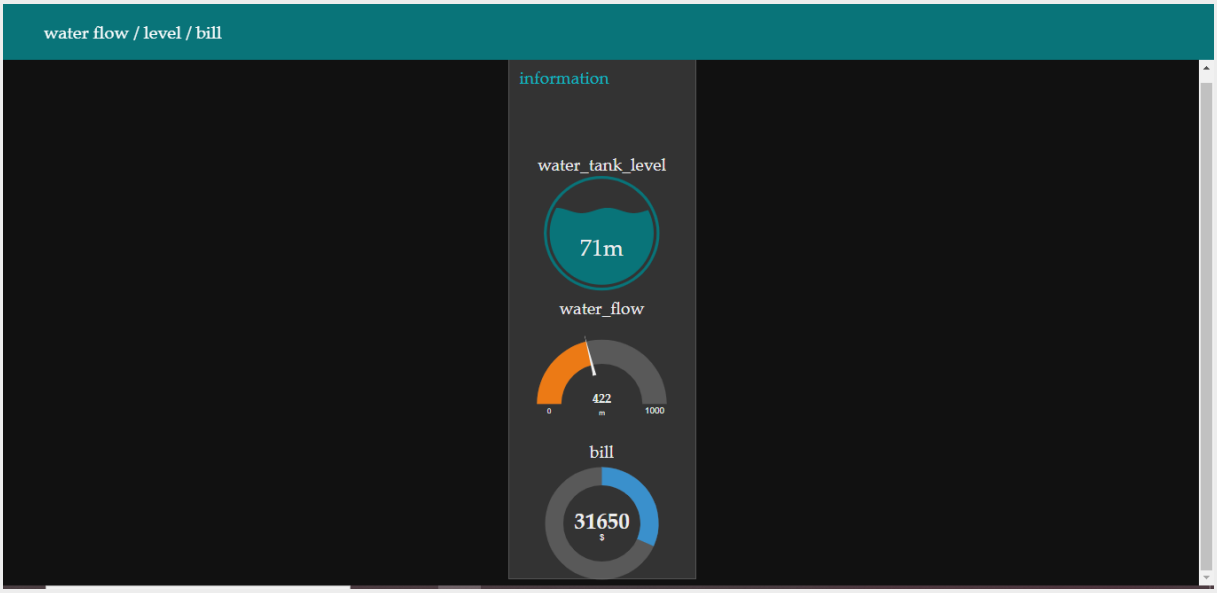
Assuming that the price of 1gpm is 75$ (which is a random number)
Which give us this result:





- Dashbord results :




water flow / level / bill
information
water_tank_level
71m
water_flow
422
m
0
1000
bill
31650
$