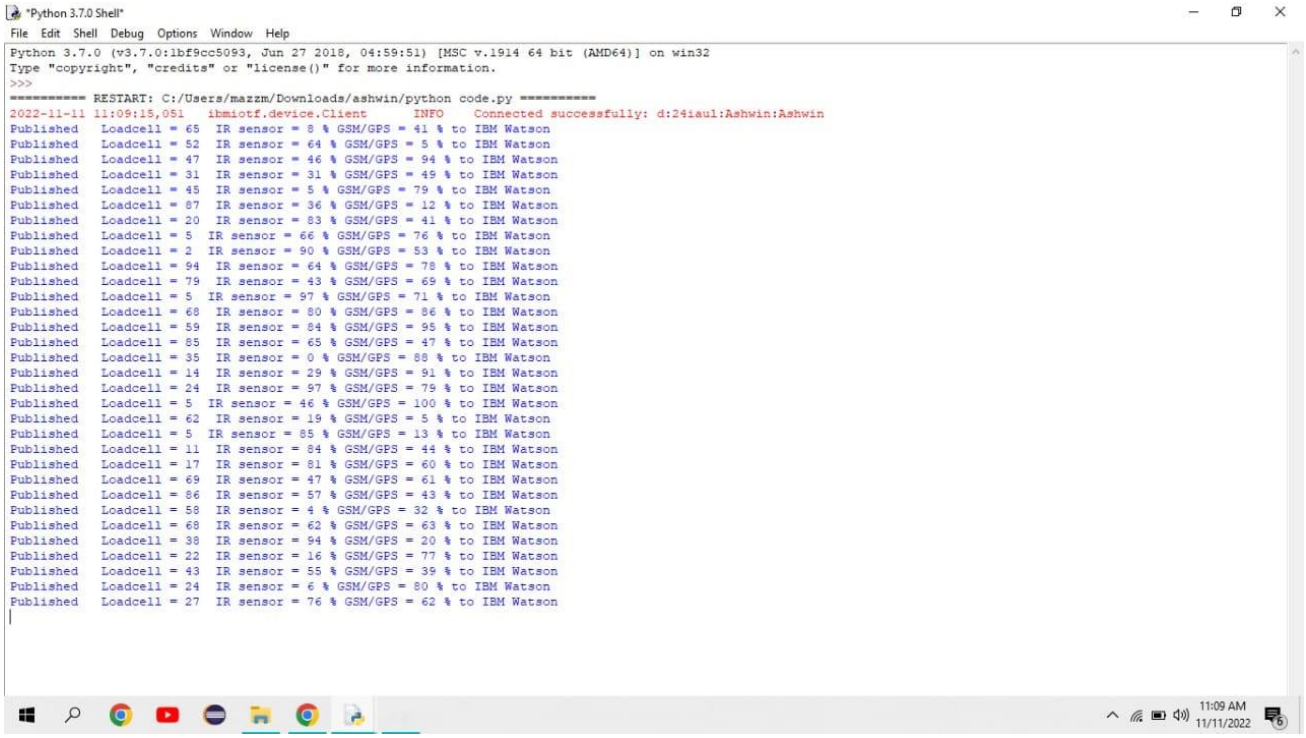
Date	11 NOVEMBER 2022
Team ID	PNT2022TMID47456
Project Name	SMART WASTE MANAGEMENT FOR METROPOLITIEN CITIESS
Maximum Marks	20 Marks

SPRINT-3

FIG 1&2 : Develop a python script to publish random sensor data such as load cell , IR sensor and GSM/GPS

FIG 3: Output for python script



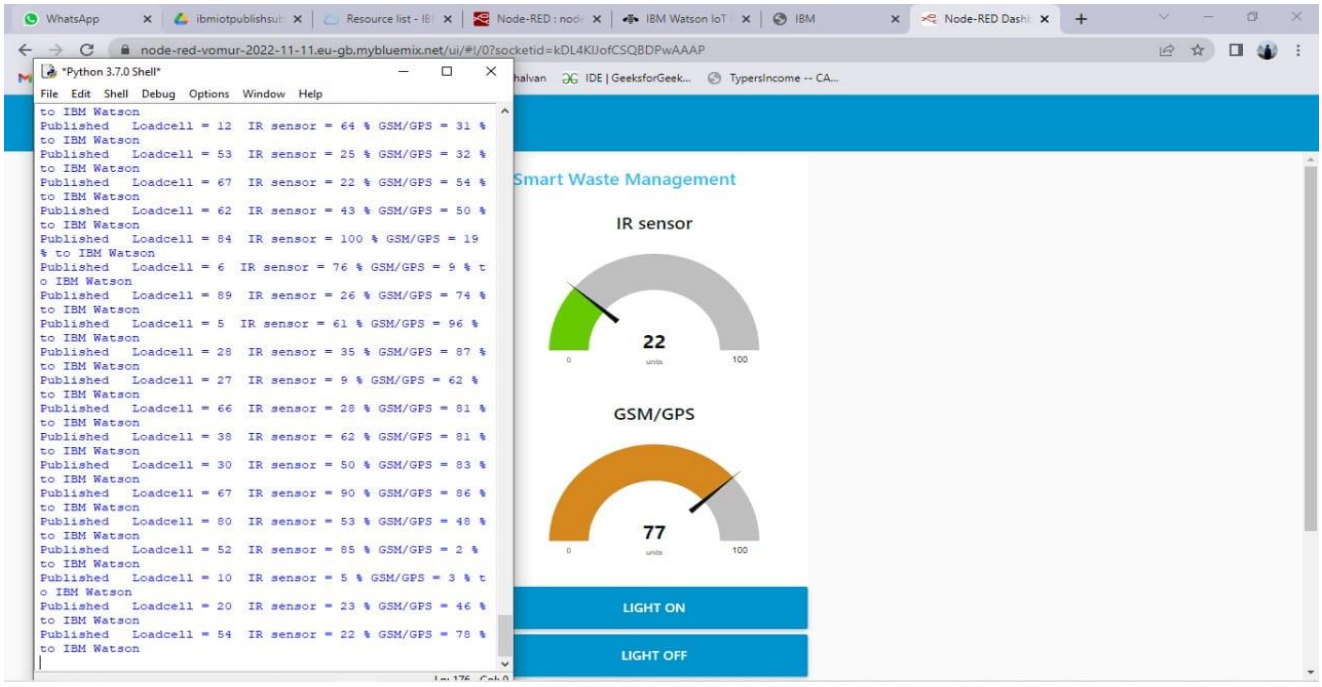
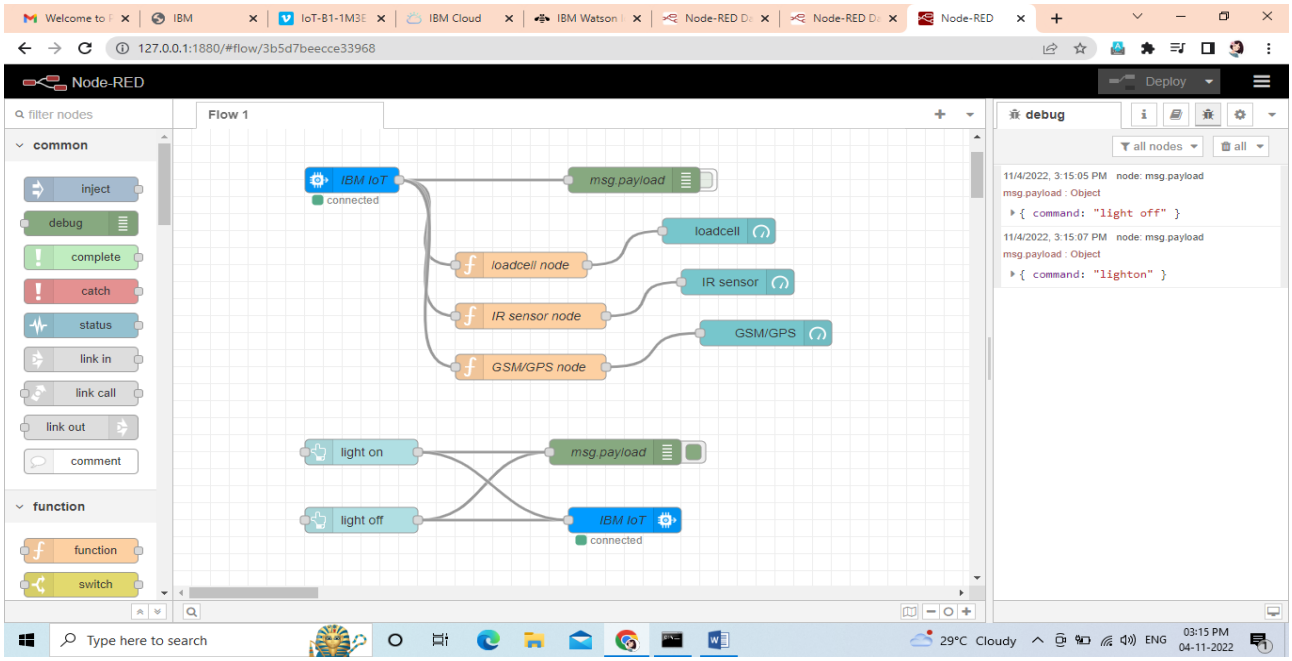


FIG 4: After developing python code , commands are received just print the statements which represent the control of the device


Node-RED
Deploy
Flow 1
common
inject
debug
complete
catch
status
link in
link call
link out
comment
function
function
switch
IBM IoT
connected
msg.payload
loadcell
loadcell node
IR sensor
IR sensor node
GSM/GPS
GSM/GPS node
light on
light off
msg.payload
IBM IoT
connected
debug
all nodes
all
11/4/2022, 3:15:05 PM node: msg.payload
msg.payload : Object
{ command: "light off" }
11/4/2022, 3:15:07 PM node: msg.payload
msg.payload : Object
{ command: "lighton" }
Type here to search
29°C Cloudy
ENG
03:15 PM
04-11-2022


Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
Published Loadcell = 1 IR sensor = 21 % GSM/GPS = 66 % to IBM Watson
Published Loadcell = 90 IR sensor = 80 % GSM/GPS = 45 % to IBM Watson
Published Loadcell = 71 IR sensor = 70 % GSM/GPS = 61 % to IBM Watson
Published Loadcell = 6 IR sensor = 33 % GSM/GPS = 48 % to IBM Watson
Published Loadcell = 88 IR sensor = 6 % GSM/GPS = 42 % to IBM Watson
Published Loadcell = 48 IR sensor = 63 % GSM/GPS = 22 % to IBM Watson
Published Loadcell = 77 IR sensor = 49 % GSM/GPS = 59 % to IBM Watson
Published Loadcell = 14 IR sensor = 40 % GSM/GPS = 12 % to IBM Watson
Published Loadcell = 36 IR sensor = 98 % GSM/GPS = 3 % to IBM Watson
Published Loadcell = 1 IR sensor = 98 % GSM/GPS = 23 % to IBM Watson
Published Loadcell = 90 IR sensor = 41 % GSM/GPS = 68 % to IBM Watson
Published Loadcell = 49 IR sensor = 47 % GSM/GPS = 27 % to IBM Watson
Published Loadcell = 11 IR sensor = 87 % GSM/GPS = 93 % to IBM Watson
Command received: lighton
led is on
Published Loadcell = 4 IR sensor = 90 % GSM/GPS = 46 % to IBM Watson
Command received: Lightoff
led is off
Published Loadcell = 93 IR sensor = 32 % GSM/GPS = 52 % to IBM Watson
Command received: lighton
led is on
Published Loadcell = 28 IR sensor = 44 % GSM/GPS = 83 % to IBM Watson
Published Loadcell = 70 IR sensor = 51 % GSM/GPS = 38 % to IBM Watson
Command received: Lightoff
led is off
Command received: lighton
led is on
Published Loadcell = 61 IR sensor = 11 % GSM/GPS = 34 % to IBM Watson
Published Loadcell = 96 IR sensor = 3 % GSM/GPS = 54 % to IBM Watson
Published Loadcell = 13 IR sensor = 8 % GSM/GPS = 93 % to IBM Watson
Published Loadcell = 4 IR sensor = 96 % GSM/GPS = 98 % to IBM Watson
Published Loadcell = 77 IR sensor = 95 % GSM/GPS = 100 % to IBM Watson
Published Loadcell = 14 IR sensor = 31 % GSM/GPS = 8 % to IBM Watson
Published Loadcell = 41 IR sensor = 21 % GSM/GPS = 14 % to IBM Watson
Published Loadcell = 80 IR sensor = 32 % GSM/GPS = 93 % to IBM Watson
Published Loadcell = 80 IR sensor = 34 % GSM/GPS = 10 % to IBM Watson
Published Loadcell = 96 IR sensor = 38 % GSM/GPS = 19 % to IBM Watson
Published Loadcell = 23 IR sensor = 37 % GSM/GPS = 82 % to IBM Watson
Published Loadcell = 62 IR sensor = 45 % GSM/GPS = 94 % to IBM Watson
Published Loadcell = 37 IR sensor = 31 % GSM/GPS = 91 % to IBM Watson
Published Loadcell = 76 IR sensor = 52 % GSM/GPS = 45 % to IBM Watson
Published Loadcell = 84 IR sensor = 62 % GSM/GPS = 18 % to IBM Watson
Published Loadcell = 11 IR sensor = 11 % GSM/GPS = 55 % to IBM Watson
Ln: 5 Col: 0

FIG 6: Publish data to the IBM cloud