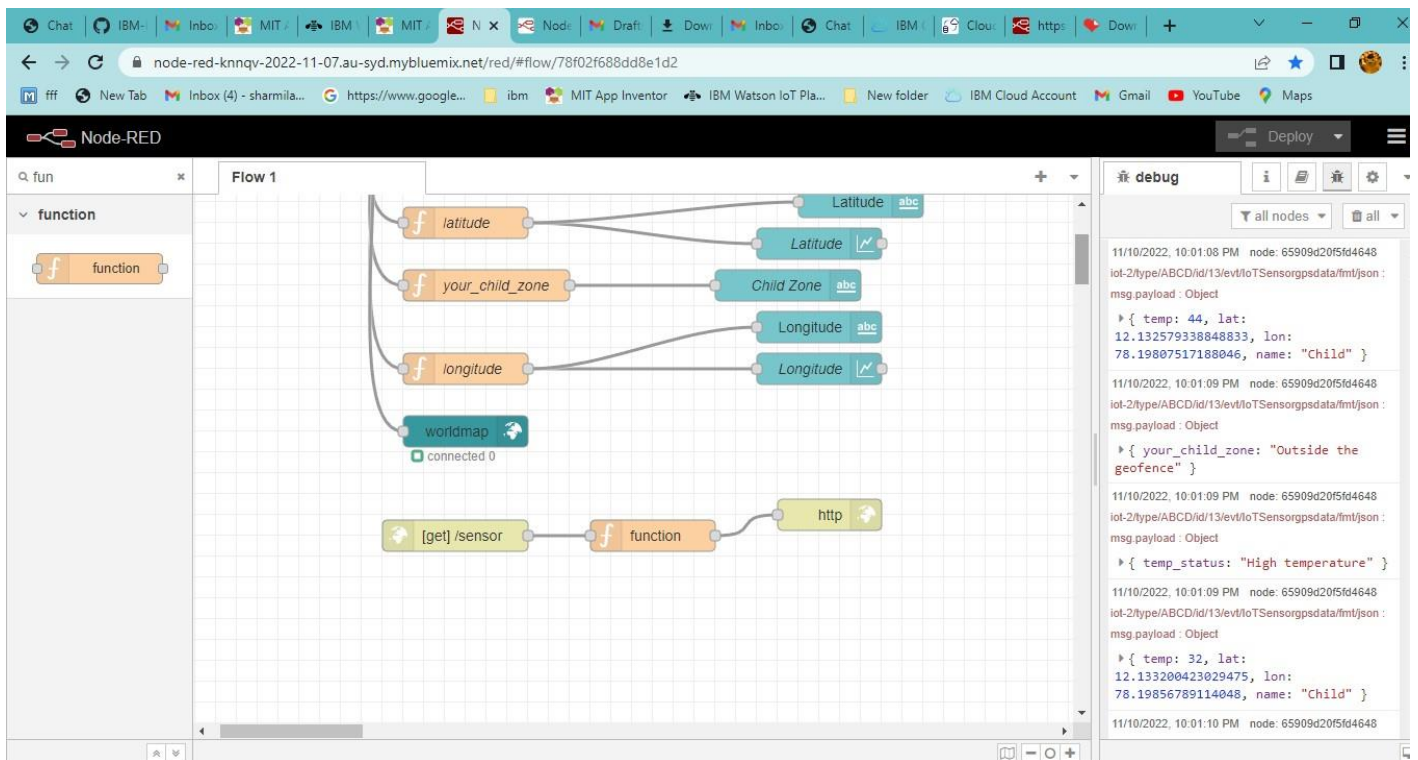
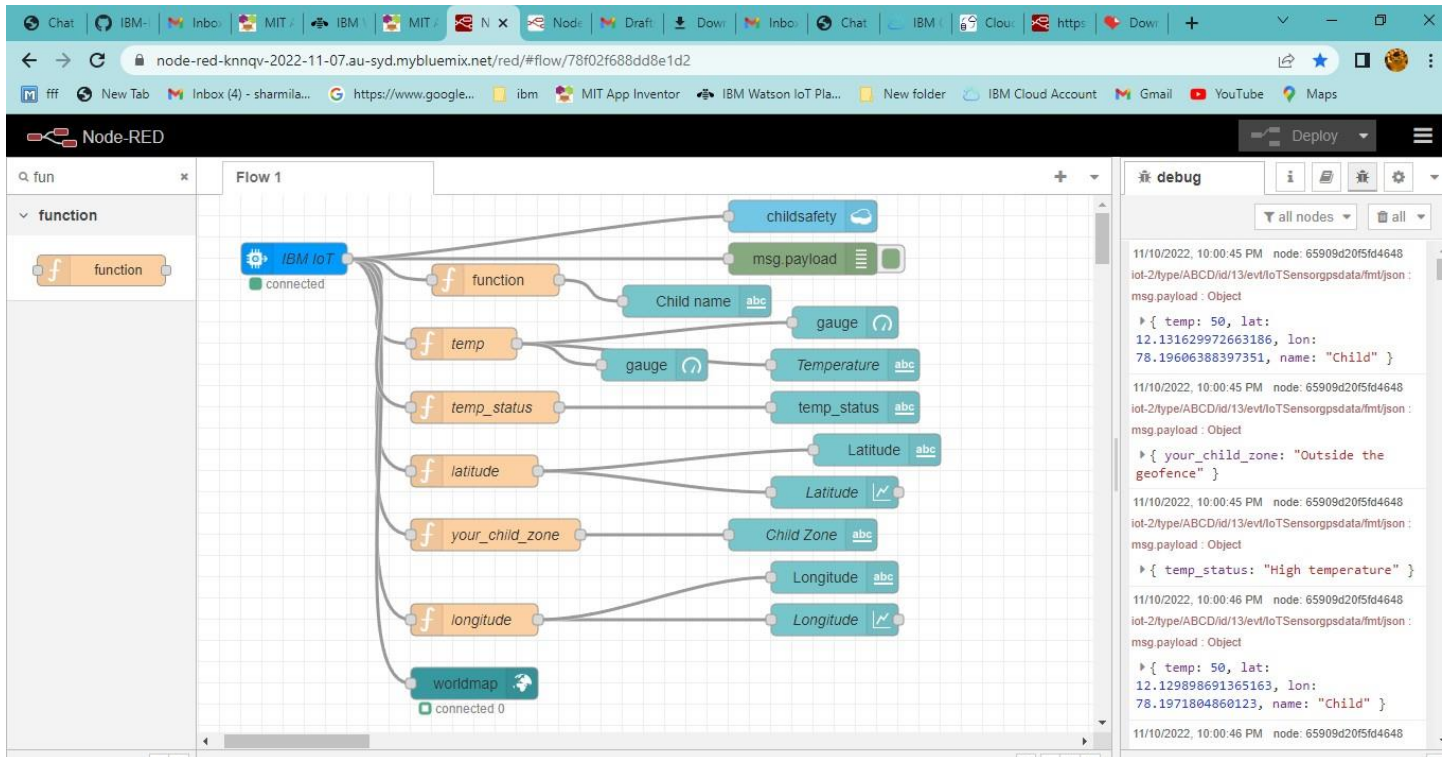
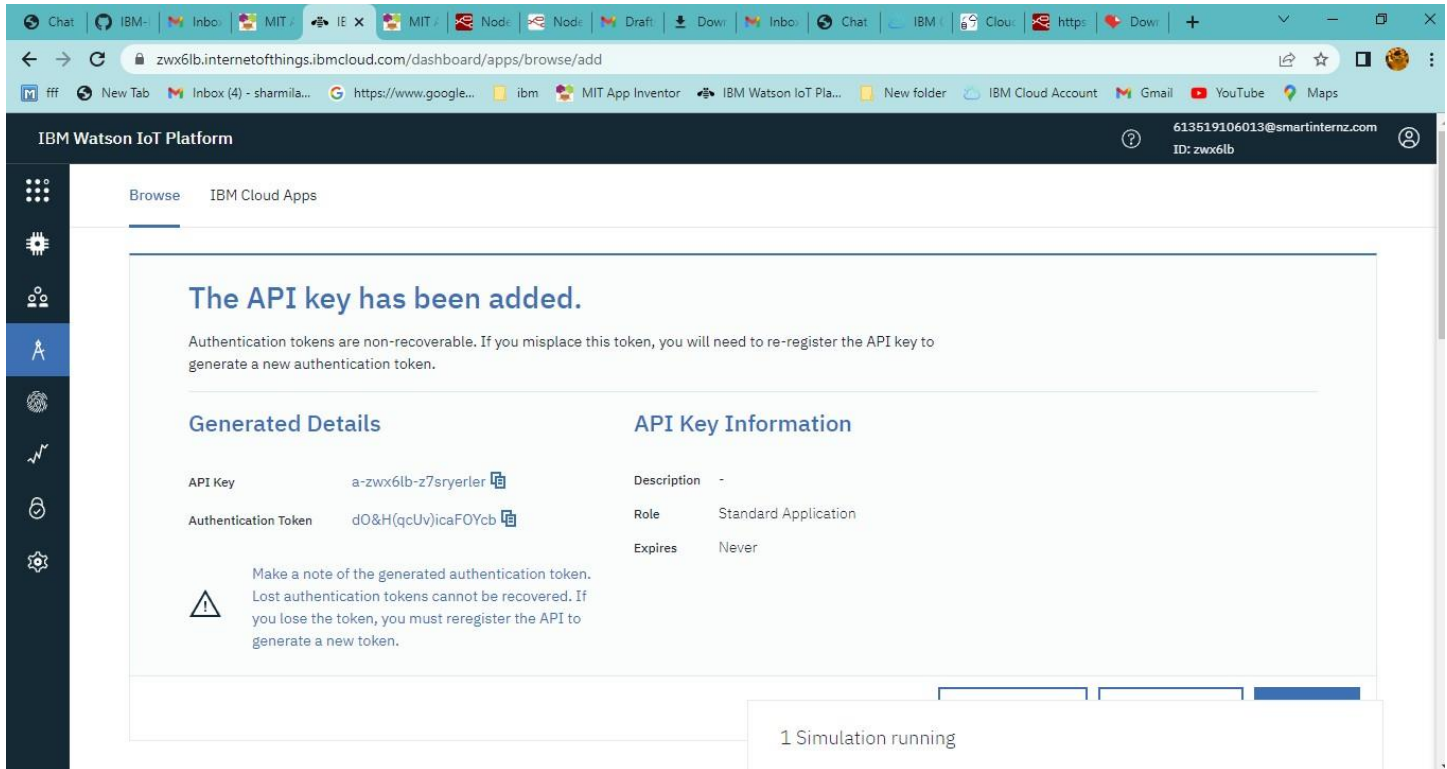


Creating Node-Red service:



Connecting with IBM Cloud:

Using IBM IOT node through API key



The screenshot shows the IBM Watson IoT Platform dashboard. The top navigation bar includes the IBM logo and the user profile '613519106013@smartinternz.com' with ID 'zwx6lb'. The main content area displays a success message: 'The API key has been added.' Below this, it states: 'Authentication tokens are non-recoverable. If you misplace this token, you will need to re-register the API key to generate a new authentication token.'

The 'Generated Details' section shows:

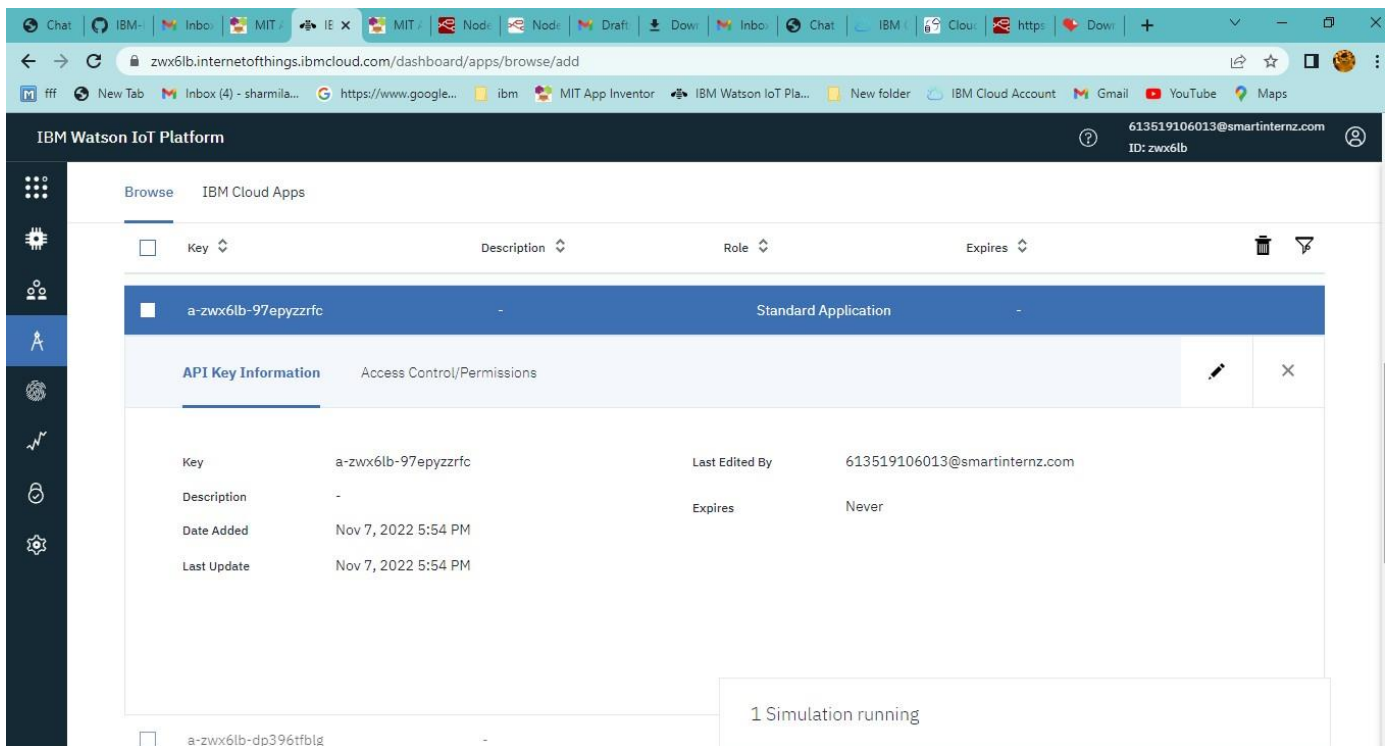
Field	Value
API Key	a-zwx6lb-z7sryerler
Authentication Token	dO&H(qcUv)icaFOYcb

The 'API Key Information' section shows:

Field	Value
Description	-
Role	Standard Application
Expires	Never

A warning icon and text state: 'Make a note of the generated authentication token. Lost authentication tokens cannot be recovered. If you lose the token, you must reregister the API to generate a new token.'

At the bottom, a status bar indicates '1 Simulation running'.



The screenshot shows the IBM Watson IoT Platform dashboard with the API key details expanded. The top navigation bar is the same as the previous screenshot. The main content area shows a table of API keys with columns: Key, Description, Role, and Expires. The first key is 'a-zwx6lb-97epyzrfc' with role 'Standard Application'.

The 'API Key Information' section for this key shows:

Field	Value
Key	a-zwx6lb-97epyzrfc
Description	-
Date Added	Nov 7, 2022 5:54 PM
Last Update	Nov 7, 2022 5:54 PM
Last Edited By	613519106013@smartinternz.com
Expires	Never

At the bottom, a status bar indicates '1 Simulation running'.

Transferring values from Python Code:

Child Safety device.py - C:/Users/kutta/Desktop/IBM-Dr/Child Safety device.py (3.7.4)

File Edit Format Run Options Window Help

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random
#Provide your IBM Watson Device Credentials
organization = "illzal"
deviceType = "latlonem"
deviceId = "613510"
authMethod = "token"
authToken = "1092837465"
#api key (a-illzal-mbdxqo6z0s)
#api token (zSYzISuAWEF_x7GkT)

try:
    deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "auth-method": authMethod}
    deviceCli = ibmiotf.device.Client(deviceOptions)
    #.....
except Exception as e:
    print("Caught exception connecting device: %s" % str(e))
    sys.exit()

# Connect and send a datapoint "hello" with value "world" into the cloud as an event of type
print("power on ")
print("checking connection to waston iot...")
time.sleep(2)
deviceCli.connect()
print("dear user ... welcome to IBM-IOT ")
print("i can provide your children live location and temperature ")
print()
name=str(input("enter your child name:"))
while True:

    temperature=random.randint(20,50)#random temperature for your child
    latitude=random.uniform(10.781377,10.78643)#random latitude for your child
    longitude=random.uniform(79.129113,79.134014)#random longitude for your child

    data = { 'temp' : temperature, 'lat': latitude, 'lon':longitude, 'name':name }
    #print data
    def myOnPublishCallback():
        print("Published Temperature = %s C & Latitude = %s & Lon = %s & Name = %s" % (temperature, latitude, longitude, name))
```

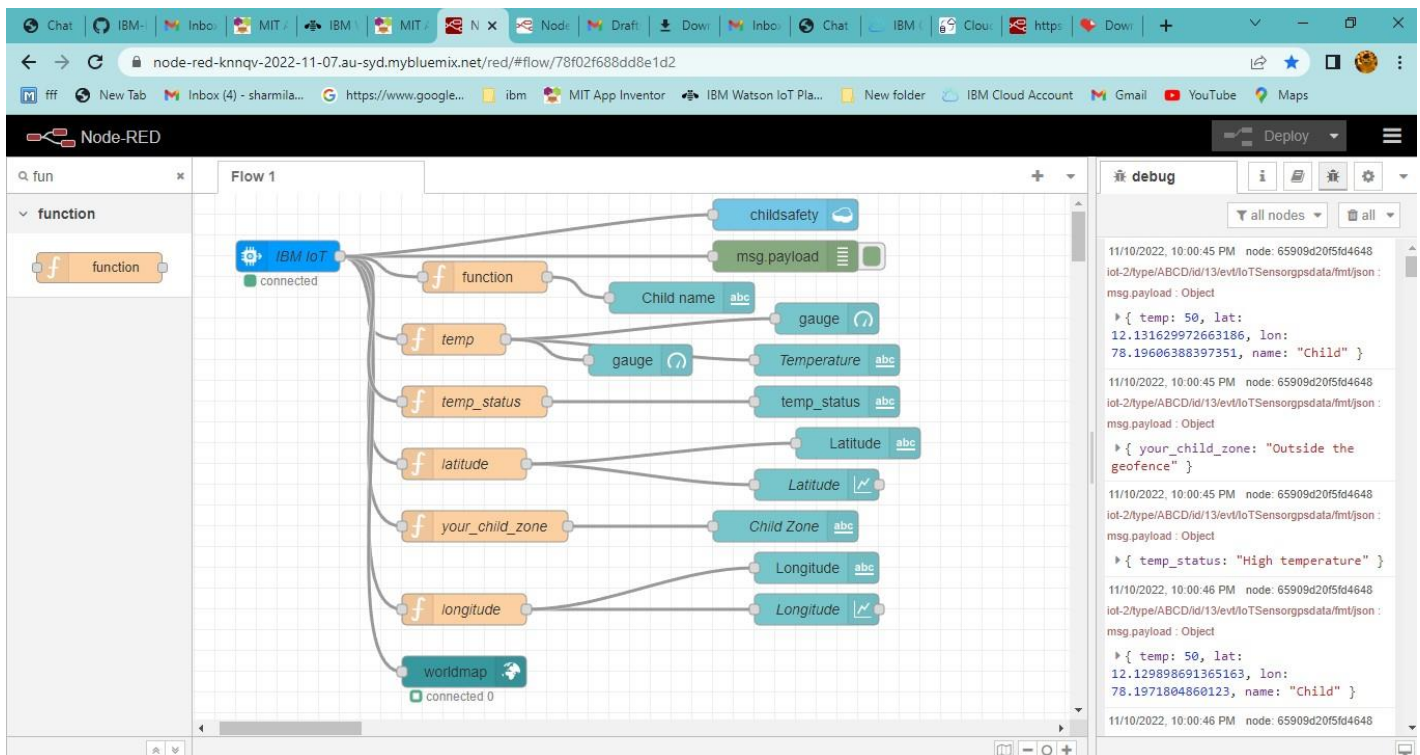
Python 3.7.4 Shell

File Edit Shell Debug Options Window Help

```
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 20:34:20) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/kutta/Desktop/IBM-Dr/Child Safety device.py =====
power on
checking connection to waston iot...
2022-11-10 22:14:21,799 ibmiotf.device.Client INFO Connected success
lly: d:illzal:latlonem:613510
dear user ... welcome to IBM-IOT
i can provide your children live location and temperature

enter your child name:child
Published Temperature = 39 C latitude = 10.782749628132827 & longitude = 79.1255540076 & to IBM Watson
Published Temperature = 39 C latitude = 10.782669248109656 & longitude = 79.1255540076 & to IBM Watson
Published Temperature = 43 C latitude = 10.781765104656792 & longitude = 79.1255540076 & to IBM Watson
Published Temperature = 30 C latitude = 10.786083936690018 & longitude = 79.1255540076 & to IBM Watson
Published Temperature = 31 C latitude = 10.784810558975826 & longitude = 79.1255540076 & to IBM Watson
Published Temperature = 45 C latitude = 10.785949922923024 & longitude = 79.1255540076 & to IBM Watson
Published Temperature = 24 C latitude = 10.784168891438233 & longitude = 79.1255540076 & to IBM Watson
Published Temperature = 23 C latitude = 10.786248060883958 & longitude = 79.1255540076 & to IBM Watson
Published Temperature = 27 C latitude = 10.783808327214418 & longitude = 79.1255540076 & to IBM Watson
Published Temperature = 43 C latitude = 10.786340416981865 & longitude = 79.1255540076 & to IBM Watson
Published Temperature = 49 C latitude = 10.786208956579015 & longitude = 79.1255540076 & to IBM Watson
Published Temperature = 45 C latitude = 10.783690544907325 & longitude = 79.1255540076 & to IBM Watson
504415061 & to IBM Watson
```

Node-Red:



Node-Red Dashboard:

