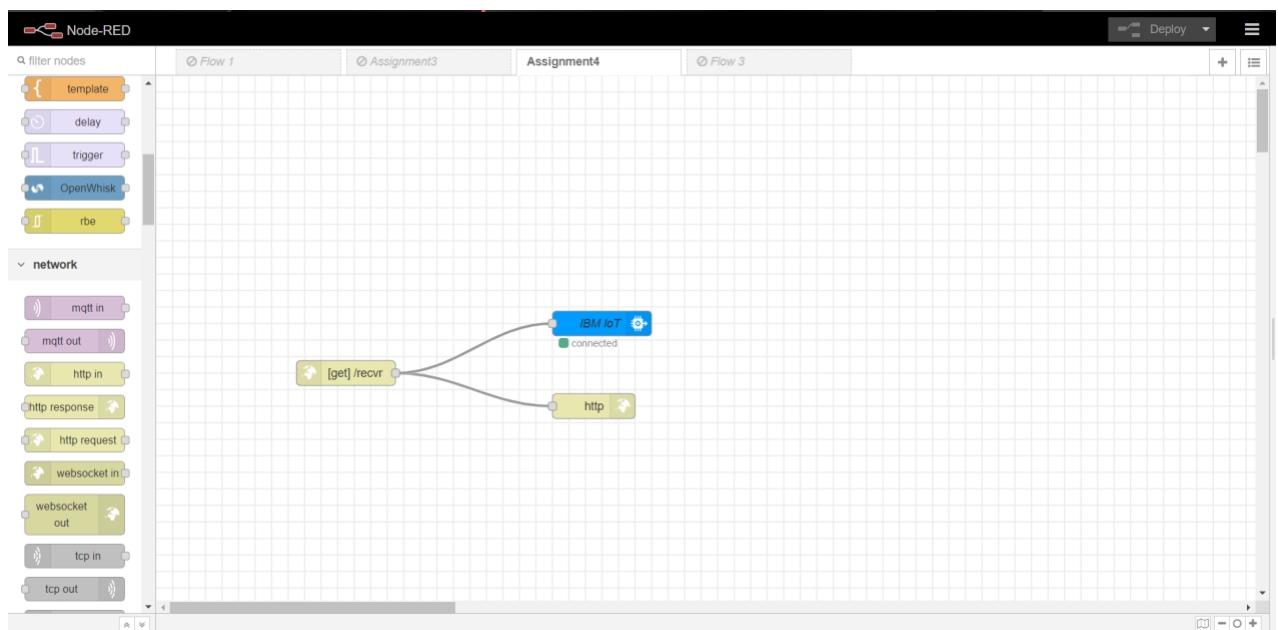**NAME:** Maram Tejaswanth Reddy

MAIL ID: tejaswanthmaram@gmail.com

<u>ASSIGNMENT-4</u>

AIM: To develop a mobile application that takes the user input and sends it to IoT device (python code). print the received data in python shell.

Node-RED Flow:

PROGRAM:

```python
import wiotp.sdk.device
import time
import random
myConfig = {
   "identity": {
      "orgId": "udbkdj",
      "typeId": "Third_device",
      "deviceId":"Ziggy3"
   },
   "auth": {
      "token": "9030435887"
   }
}


def myCommandCallback(cmd):
   m=cmd.data['command']
   print(f"\nMessage received from IBM IoT Platform: {m}\n")



client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
client.connect()

while True:
   client.commandCallback = myCommandCallback
   time.sleep(2)
client.disconnect()
```
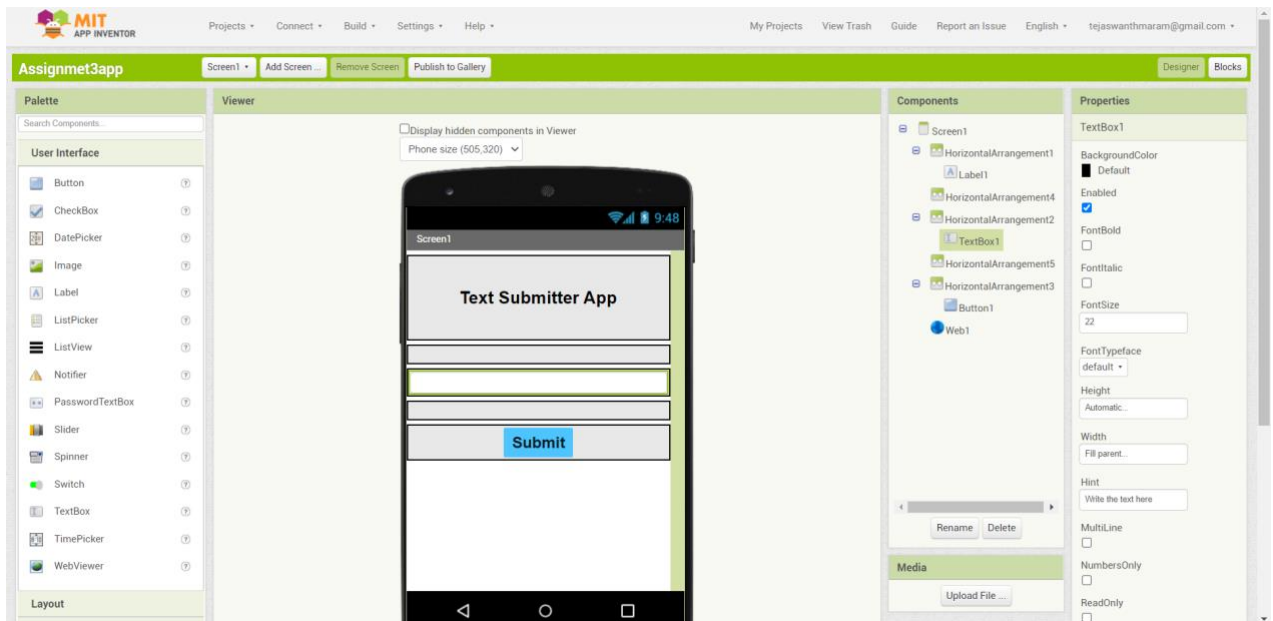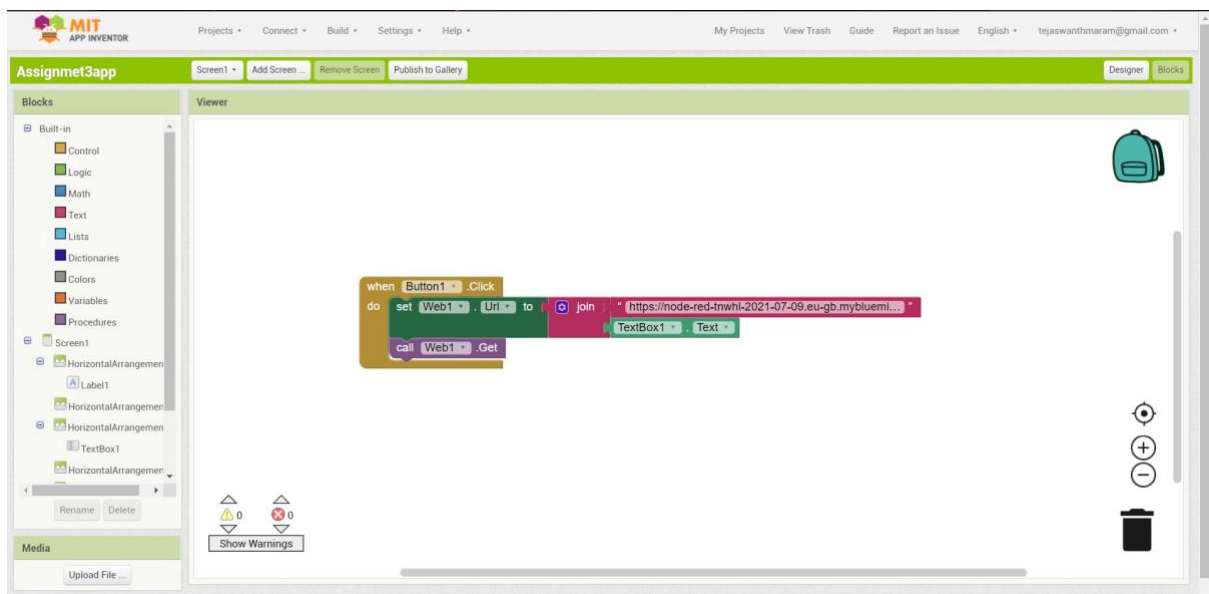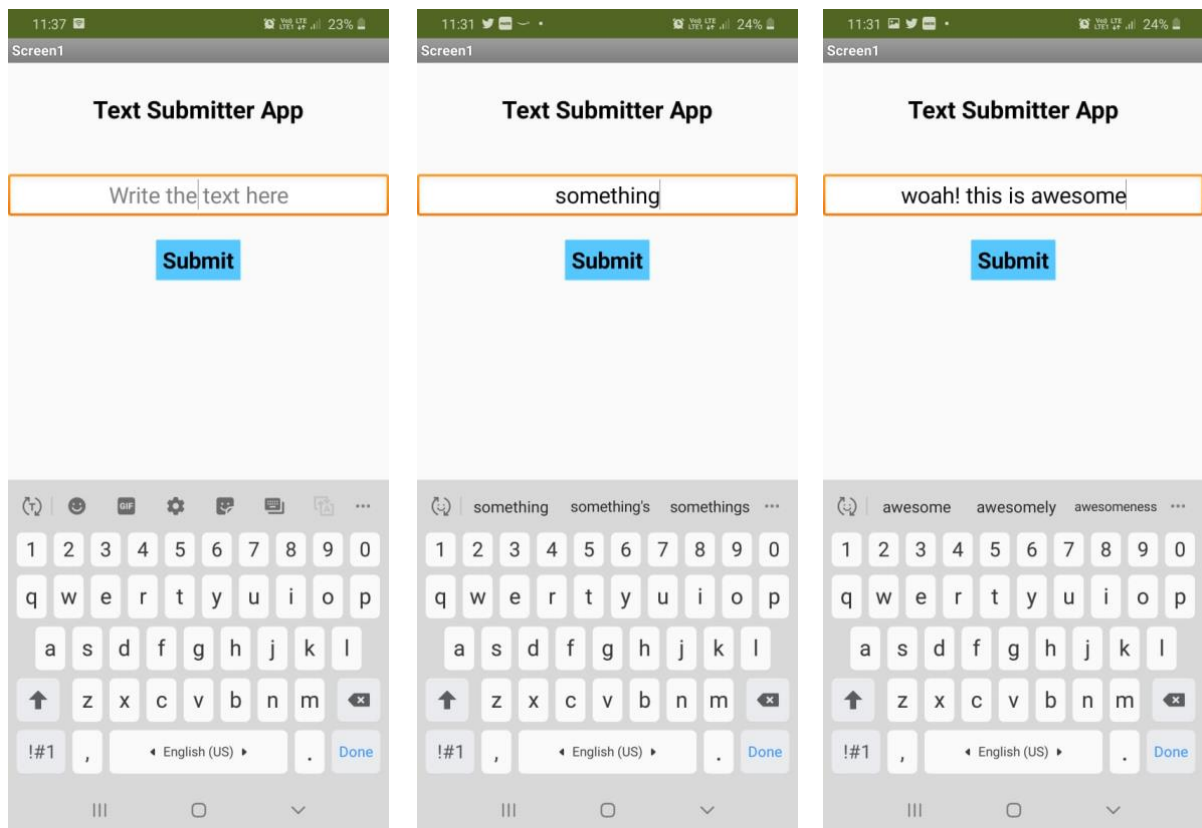
SIMULATION:

MIT Inventor App Designer:

MIT Inventor App Blocks:

App in Phone:

Pyhton(jupyter notebook):


```python
In [*]: import wiotp.sdk.device
        import time
        import random
        myConfig = {
            "identity": {
                "orgId": "udbkdj",
                "typeId": "Third_device",
                "deviceId":"Ziggy3"
            },
            "auth": {
                "token": "9030435887"
            }
        }

        def myCommandCallback(cmd):
            m=cmd.data['command']
            print(f"\nMessage received from IBM IoT Platform: {m}\n")

        client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)
        client.connect()

        while True:
            client.commandCallback = myCommandCallback
            time.sleep(2)
        client.disconnect()


        2021-07-17 11:31:20,540   wiotp.sdk.device.client.DeviceClient   INFO     Connected successfully: d:udbkdj:Third_device:Ziggy3

        Message received from IBM IoT Platform: something

        Message received from IBM IoT Platform: woah! this is awesome
```

Messages received in Python:

```
2021-07-17 11:31:20,540   wiotp.sdk.device.client.DeviceClient  INFO    Connected successfully: d:udbkdj:Third_device:Ziggy3

Message received from IBM IoT Platform: something

Message received from IBM IoT Platform: woah! this is awesome
```

RESULT: Hence, mobile application is developed which takes the user input and sends it to IoT device (python code). print the received data in python shell.