Utilization of Algortihm,Dynamic Programming,Optimization

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Team Id	PNT2022MID21355
Project name	Personal Assistance for Seniors who are self reliant

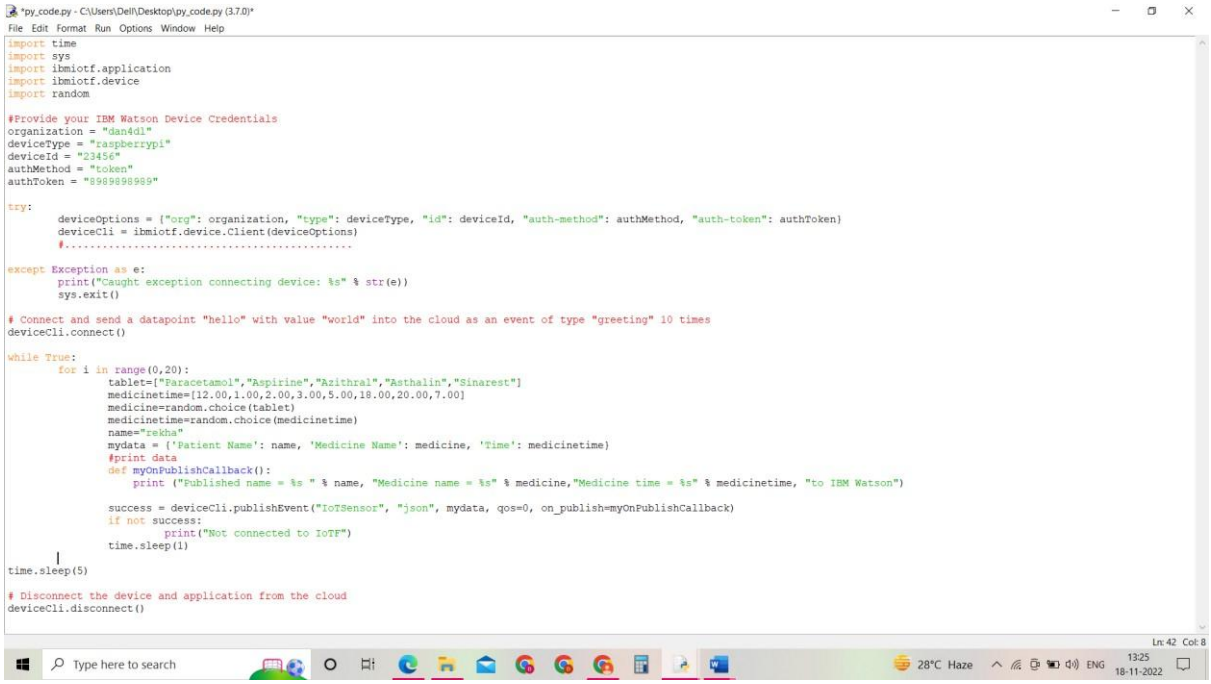
Proper usage of algorithms, and dynamic programming is implemented and code is optimized.

CODE:

```
import time

import sys

import ibmiotf.application

import ibmiotf.device

import random


#Provide your IBM Watson Device Credentials

organization = "dan4dl"

deviceType = "raspberrypi"

deviceId = "23456"

authMethod = "token"

authToken = "8989898989"


try:

        deviceOptions = {"org": organization, "type": deviceType, "id": deviceId, "auth-method": authMethod, "auth-token": authToken}

        deviceCli = ibmiotf.device.Client(deviceOptions)

        #.....................................


except Exception as e:

        print("Caught exception connecting device: %s" % str(e))

        sys.exit()
```

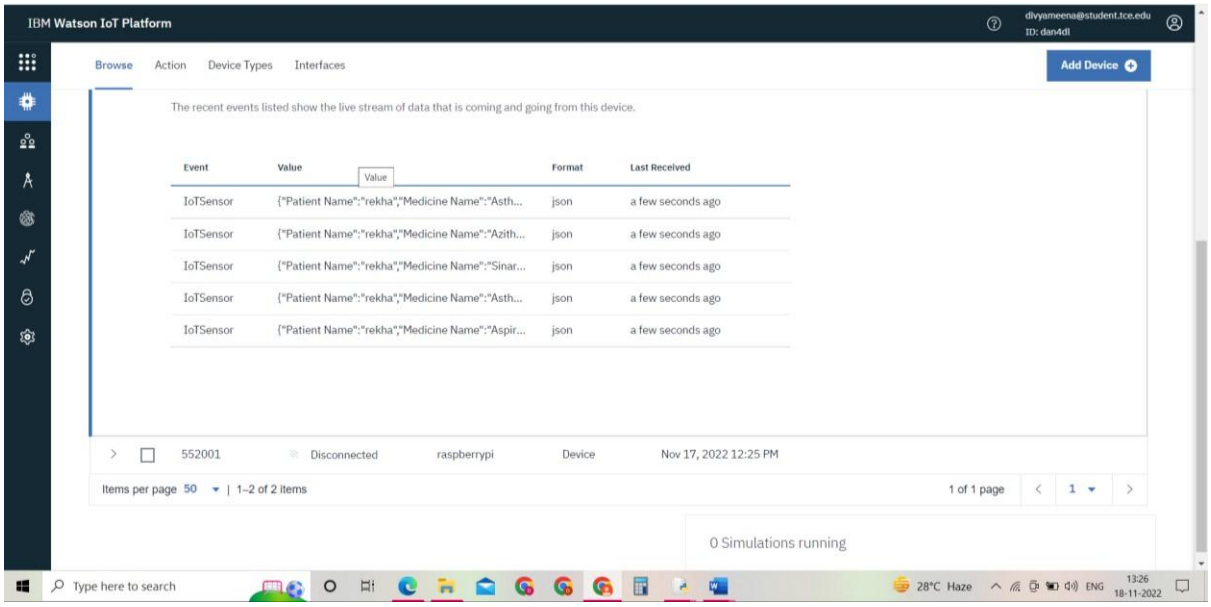
```
# Connect and send a datapoint "hello" with value "world" into the cloud as an event of type "greeting" 10 times

deviceCli.connect()


while True:

    for i in range(0,20):

        tablet=["Paracetamol","Aspirine","Azithral","Asthalin","Sinarest"]

        medicinetime=[12.00,1.00,2.00,3.00,5.00,18.00,20.00,7.00]

        medicine=random.choice(tablet)

        medicinetime=random.choice(medicinetime)

        name="rekha"

        mydata = {'Patient Name': name, 'Medicine Name': medicine, 'Time': medicinetime}

        #print data

        def myOnPublishCallback():

          print ("Published name = %s " % name, "Medicine name = %s" % medicine,"Medicine time = %s" % medicinetime, "to IBM Watson")

        success = deviceCli.publishEvent("IoTSensor", "json", mydata, qos=0, on_publish=myOnPublishCallback)

        if not success:

            print("Not connected to IoTF")

        time.sleep(1)

time.sleep(5)

# Disconnect the device and application from the cloud

deviceCli.disconnect()
```

CODE SNAPSHOT:



OUTPUT:

IOT PLATFORM OUTPUT:


IBM Watson IoT Platform
divyameena@student.tce.edu
ID: dan4dl
Browse
Action
Device Types
Interfaces
Add Device
The recent events listed show the live stream of data that is coming and going from this device.
Event
Value
Format
Last Received
IoTSensor
{"Patient Name":"rekha","Medicine Name":"Asth...
json
a few seconds ago
IoTSensor
{"Patient Name":"rekha","Medicine Name":"Azith...
json
a few seconds ago
IoTSensor
{"Patient Name":"rekha","Medicine Name":"Sinar...
json
a few seconds ago
IoTSensor
{"Patient Name":"rekha","Medicine Name":"Asth...
json
a few seconds ago
IoTSensor
{"Patient Name":"rekha","Medicine Name":"Aspir...
json
a few seconds ago
552001
Disconnected
raspberrypi
Device
Nov 17, 2022 12:25 PM
Items per page 50
1–2 of 2 items
1 of 1 page
0 Simulations running
Type here to search
28°C Haze
ENG
13:26
18-11-2022