

Code:

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random

#Provide your IBM Watson Device Credentials
organization = "1dsau7"
deviceType = "child"
deviceId = "2502"
authMethod = "token"
authToken = "234567890"
#api key {a-illza1-mbdxqo6z0s}
#api token {zSYzISuAWF&F_x7GkT}

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
```

```
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 ")
```

```
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
```

```
    a="Child inside the geofence"
```

```
    b=" Child outside the geofence"
```

```
    c="High temperature"
```

```
    d="Low temperature"
```

```
    x={'your_child_Zone':a}
```

```
    y={'your_child_Zone':b}
```

```
    z={'temp_condition':c}
```

```
    w={'temp_condition':d}
```

```

data = { 'temp' : temperature, 'lat': latitude, 'lon':longitude, 'name':name }

#print data

def myOnPublishCallback():

    print ("Published Temperature = %s C" % temperature, "latitude = %s
%%" % latitude, "longitude = %s %%" % longitude, "to IBM Watson")

    print("\n")

    success = deviceCli.publishEvent("IoTSensorgpsdata", "json", data,
qos=0, on_publish=myOnPublishCallback)

    if latitude>=10.78200 and latitude<=10.786000 and longitude
>=79.130000 and longitude<=79.133000:

deviceCli.publishEvent("IoTSensorgpsdata","json",data=x,qos=0,on_publish=
myOnPublishCallback)

    print(x)

    print("\n")

else:

deviceCli.publishEvent("IoTSensorgpsdata","json",data=y,qos=0,on_publish=
myOnPublishCallback)

    print(y)

    print("\n")


if (temperature>35):

deviceCli.publishEvent("IoTSensorgpsdata","json",data=z,qos=0,on_publish=
myOnPublishCallback)

    print(c)

```

```
print("\n")
```

```
else:
```

```
deviceCli.publishEvent("IoTSensorgpsdata","json",data=w,qos=0,on_publish=myOnPublishCallback)
```

```
print(d)
```

```
print("\n")
```

```
if not success:
```

```
print('Not connected to IoTf')
```

```
print("\n")
```

```
time.sleep(3)
```

Disconnect the device and application from the cloud

```
deviceCli.disconnect()
```

The screenshot shows a Python script titled 'child safety.py' running in a terminal window. The script is designed to connect an IoT device to a cloud platform (IBM Watson IoT) and publish temperature data. It includes a try-except block for connection handling and a loop for data publishing. The output in the terminal shows successful connection and data publishing with coordinates and temperature values.

```
child safety.py - C:\Users\karunya\Desktop\child safety.py (3.7.0)
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 = "idsau7"
deviceType = "child"
deviceId = "2502"
authMethod = "token"
authToken = "234567890"
#api key (a-illzal-mbdxgo6z0s)
#api token (zSYzISuAWFxf_x7GKT)

try:
    deviceOptions = {"org": organi
    deviceCli = ibmiotf.device.Cli
    #.....
except Exception as e:
    print("Caught exception connecting
    sys.exit()

# Connect and send a datapoint "hello"
print("power on ")

print("checking connection to waston i
time.sleep(2)
deviceCli.connect()
print("dear user ... welcome to IBM-IO
print("i can provide your children liv
name=str(input("enter your child name:
while True:

    temperature=random.randint(20,
    latitude=random.uniform(10.781
    longitude=random.uniform(79.12
    a="Child inside the geofence"
    b=" Child outside the geofence
    c="High temperature"
    d="Low temperature"
    x=('your_child_zone':a)
    y=('your_child_zone':b)
    z=('temp_condition':c)
    w=('temp_condition':d)

    Low temperaturePublished Temperature = 25 C
    latitude = 10.78265196538643 %
    longitude = 79.13192912311948 % to IBM Watson

    Published Temperature = 26 C latitude = 10.786141321636698 % longitude = 79.131090
    10776856 % to IBM Watson

    Published Temperature = 26 C('your_child_zone': ' Child outside the geofence')
    latitude = 10.786141321636698 %
    longitude = 79.13109010776856 % to IBM Watson

    Published Temperature = 26 CLow temperature
    latitude = 10.786141321636698 %
    longitude = 79.13109010776856 % to IBM Watson

    Published Temperature = 20 C latitude = 10.783236064891476 % longitude = 79.130448
    74507048 % to IBM Watson

    ('your_child_zone': 'Child inside the geofence')Published Temperature = 20 C
    latitude = 10.783236064891476 %
    longitude = 79.13044874507048 % to IBM Watson

    Low temperaturePublished Temperature = 20 C
    latitude = 10.783236064891476 %
    longitude = 79.13044874507048 % to IBM Watson
```