

<b>Program No:</b>	<b>21</b>
<b>Roll No :</b>	1554
<b>Title of Program :</b>	To send temperature data to thingspeak cloud and generate visualization
<b>Objective :</b>	To manually upload and visualize data on ThingSpeak using a web browser and API key.

## Source Code Information

# Internet of Things (IoT)

## Practical No. 16 (a)

Aim: To upload data on Thingspeak cloud manually.

Steps:

1. Go to Google and search for Thingspeak.
2. If you are new to Thingspeak, Do sign up and make sure you are on your Channel page.
3. Click on the NEW CHANNEL button (Green colour) and create a new channel.
4. Enter a channel name, any description of your choice, and make sure one field is selected or ticked and give that field a name of your choice. Click on save.
5. Now in the private view, make sure you see a graph (empty).
6. Now click on API KEYS tab, scroll down to find API requests section and in that copy the link of Write a Channel Feed and paste it in the Address bar of your browser. And press enter to get a blank screen with a number which indicates the number of data uploaded manually. Following is the example link:

```
https://api.thingspeak.com/update?api_key=6WEDQNFN3GBKNCQ3&field1=0
```

7. Suppose you want to change the data to be entered in the graph, just change the
8. =0 to any value of your choice in the link. Above is the link, where we had changed 0 to 40.

```
https://api.thingspeak.com/update?api_key=6WEDQNFN3GBKNCQ3&field1=40
```

9. As a result, to see the visualization (graph), goto the private view and see the graph.

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[Private View](#)
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Add Visualizations
Add Widgets
Export recent data

MATLAB Analysis
MATLAB Visualization

### Channel Stats

Created: **less than a minute ago**

Entries: 0

Field 1 Chart

My Test Channel

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Generate New Write API Key

### Read API Keys

Key

2GJC9BLFDUE01915

Note

Save Note

Delete API Key

Add New Read API Key

### API Keys Settings

- Write API Key:** Use this key to write data to a channel. If you feel your key has been compromised, click **Generate New Write API Key**.
- Read API Keys:** Use this key to allow other people to view your private channel feeds and charts. Click **Generate New Read API Key** to generate an additional read key for the channel.
- Note:** Use this field to enter information about channel read keys. For example, add notes to keep track of users with access to your channel.

### API Requests

Write a Channel Feed

GET https://api.thingspeak.com/update?api\_key=0HQCLQLVDYBYZ8P1&field1=0

Read a Channel Feed

GET https://api.thingspeak.com/channels/2930088/feeds.json?api\_key=2GJC9BLFDUE0191

Read a Channel Field

GET https://api.thingspeak.com/channels/2930088/fields/1.json?api\_key=2GJC9BLFDUE0191

Read Channel Status Updates

GET https://api.thingspeak.com/channels/2930088/status.json?api\_key=2GJC9BLFDUE0191

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### Channel Stats

Created: **8 minutes ago**

Last entry: **about a minute ago**

Entries: 2

Field 1 Chart

My Test Channel

# Channel Stats

Created: 8 minutes ago

Last entry: about a minute ago

Entries: 2

