Name:- Peitam Gotiram Mogal.
DIV:- TC- B
Roll No:- 17.
Sab:- ESIOT.

Experiment No:- 10

Aim:- Create a small dash board application to be deployed on cloud Different publisher devices can Publish their information and interested application can subscribe.

Theory :

IOT Platform :-

The IOT platforms are suits for components those help to setup manage internet connected devices A person can remotely collect data, monitor & manage all internet connected devices from a single system.

IOT Cloud platform :-

- Kaa IOT platform.
- Sitewhere
- Things peak.
- Device Hire.
- Zetta.

Kaa Features:-

1. Manage an unlimited no of connected devices
2. Set up cross-device introperability.
3. Perform A/B Semie testing.
4. Perform real-time monitoring.

Analytics

MATLAB Analysis
Explore and transform data.

MATLAB Visualizations
Visualize data in MATLAB plots.

Plugins
Display data in gauges, charts, or custom plugins.

Actions

ThingTweet
Connect a device to Twitter™ and send alerts.

TweetControl
Listen to the Twitterverse and react in real time.

TimeControl
Automatically perform actions at predetermined times with ThingSpeak apps.

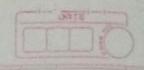**React**
React when channel data meets certain conditions.

TalkBack
Queue up commands for your device.

ThingHTTP
Simplify device communication with web services and APIs.

sitewhere - features :-
- Run any no of IoT applications on a single site where instance
- spring delivers the core configuration framework.
- Default database storage is mongoDB
- Eclipse californium for CoAP messaging

Thingspeak - features :-
- Collect data in private channels
- share data with public channels
- Restful & MQTT APIs
- Alerts.

DeviceHive - Features :-
- Directly integrate with Alexa
- Visualization dashboard of your choice.
- connect any device via REST API, websockets or MQTT.
- It comes with apache spark & spark streaming support.

zetta - features :-
- Build around Node.js, REST, websockets
- supports wide range of hacker boards.
- zetta allows you to assemble smartphone apps, device apps.

Conclusion :-
Thus, we have designed small application using Thingsspeak.