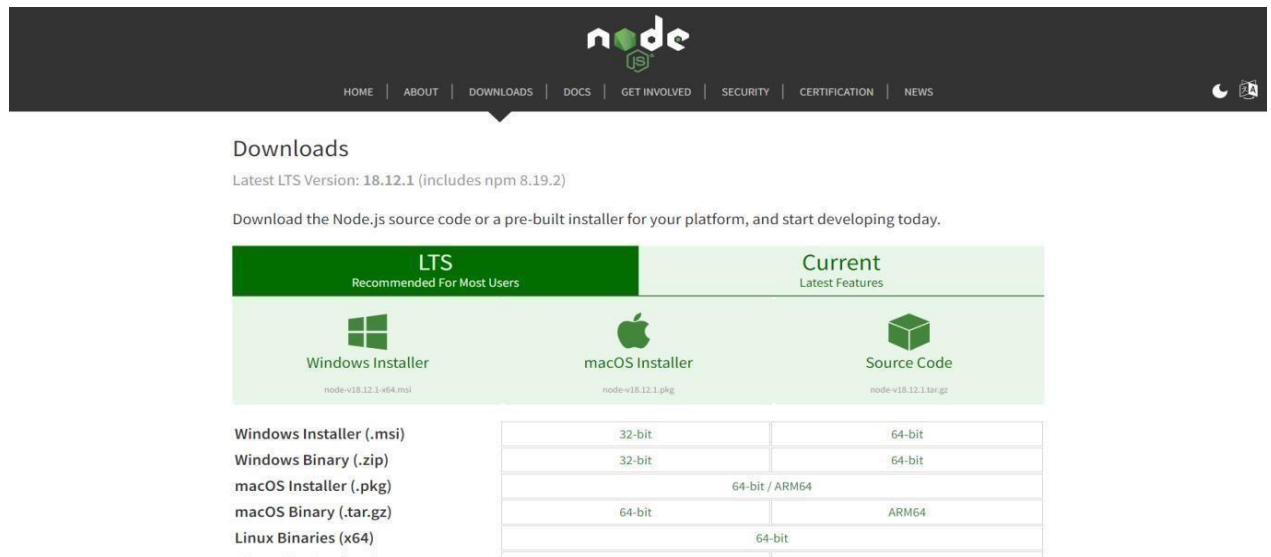


SPRINT-3

TEAM ID	PNT2022TMID22860
Project Name	IoT Based smart crop Protection system for agriculture
Maximum mark	20 marks

STEP1: Download and Install NODE JS.



The image shows the Node.js Downloads page. At the top, there's a navigation bar with links: HOME, ABOUT, DOWNLOADS, DOCS, GET INVOLVED, SECURITY, CERTIFICATION, and NEWS. Below the navigation bar, the 'Downloads' section is highlighted. It states 'Latest LTS Version: 18.12.1 (includes npm 8.19.2)' and 'Download the Node.js source code or a pre-built installer for your platform, and start developing today.' There are two main tabs: 'LTS Recommended For Most Users' and 'Current Latest Features'. Under the 'LTS' tab, there are three options: 'Windows Installer' (node-v18.12.1-x64.msi), 'macOS Installer' (node-v18.12.1.pkg), and 'Source Code' (node-v18.12.1.tar.gz). Below these, there's a table showing the availability of binaries for different architectures.

	32-bit	64-bit
Windows Installer (.msi)	32-bit	64-bit
Windows Binary (.zip)	32-bit	64-bit
macOS Installer (.pkg)	64-bit / ARM64	
macOS Binary (.tar.gz)	64-bit	ARM64
Linux Binaries (x64)	64-bit	

STEP2: Setup node.js and configure command prompt for error check .open node-red from the generated link.

```
node-red
Microsoft Windows [Version 10.0.22000.856]
(c) Microsoft Corporation. All rights reserved.

C:\Users\sarav>node-red
19 Nov 21:43:45 - [info]

Welcome to Node-RED
=====

19 Nov 21:43:45 - [info] Node-RED version: v3.0.2
19 Nov 21:43:45 - [info] Node.js version: v18.12.0
19 Nov 21:43:45 - [info] Windows_NT 10.0.22000 x64 LE
19 Nov 21:43:46 - [info] Loading palette nodes
19 Nov 21:43:48 - [info] Dashboard version 3.2.0 started at /ui
19 Nov 21:43:48 - [info] Settings file : C:\Users\sarav\.node-red\settings.js
19 Nov 21:43:48 - [info] Context store : 'default' [module=memory]
19 Nov 21:43:48 - [info] User directory : \Users\sarav\.node-red
19 Nov 21:43:48 - [warn] Projects disabled : editorTheme.projects.enabled=false
19 Nov 21:43:48 - [info] Flows file : \Users\sarav\.node-red\flows.json
19 Nov 21:43:48 - [info] Server now running at http://127.0.0.1:1880/
19 Nov 21:43:48 - [warn]

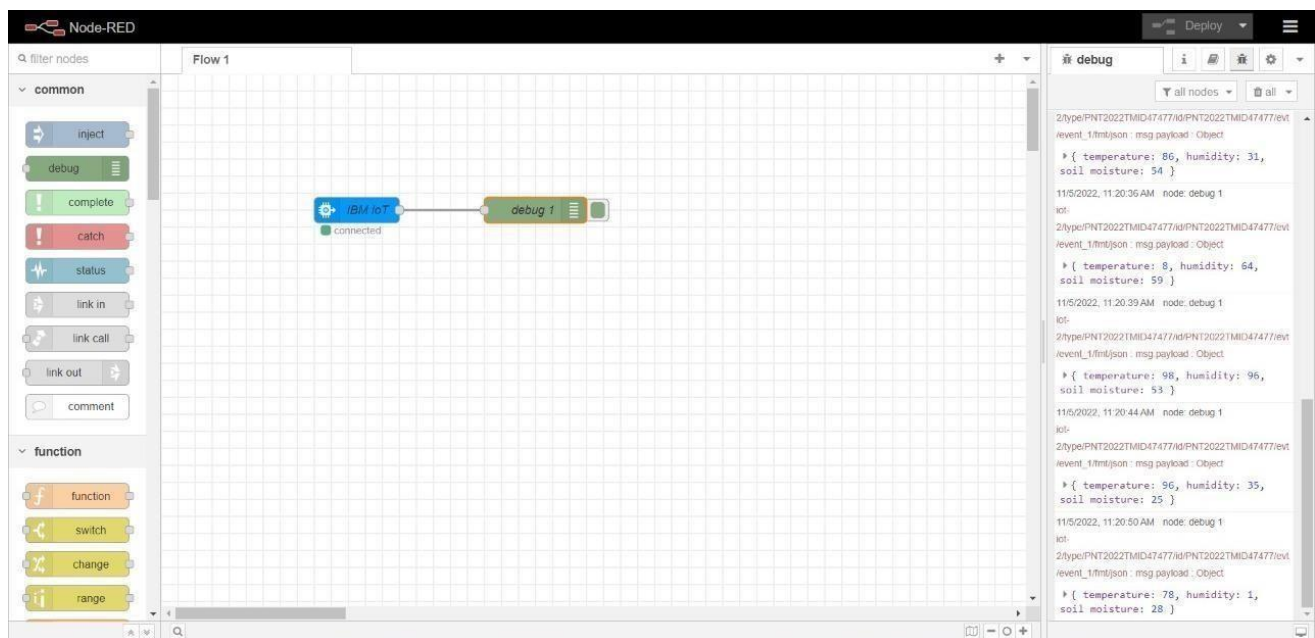
-----
Your flow credentials file is encrypted using a system-generated key.

If the system-generated key is lost for any reason, your credentials
file will not be recoverable, you will have to delete it and re-enter
your credentials.

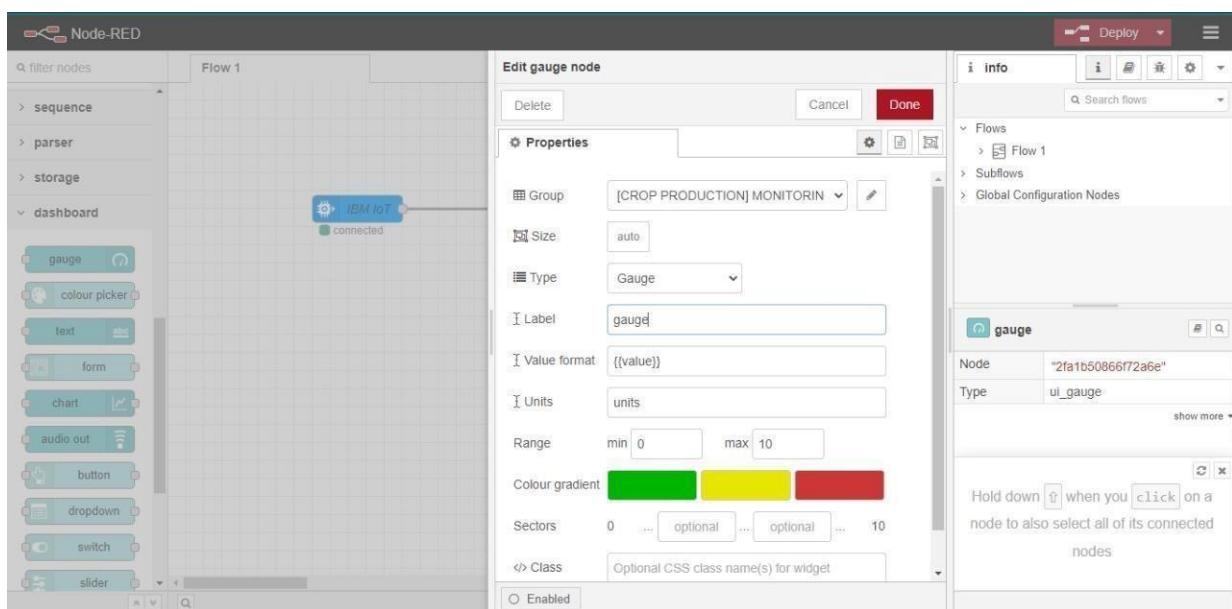
You should set your own key using the 'credentialSecret' option in
your settings file. Node-RED will then re-encrypt your credentials
file using your chosen key the next time you deploy a change.
-----

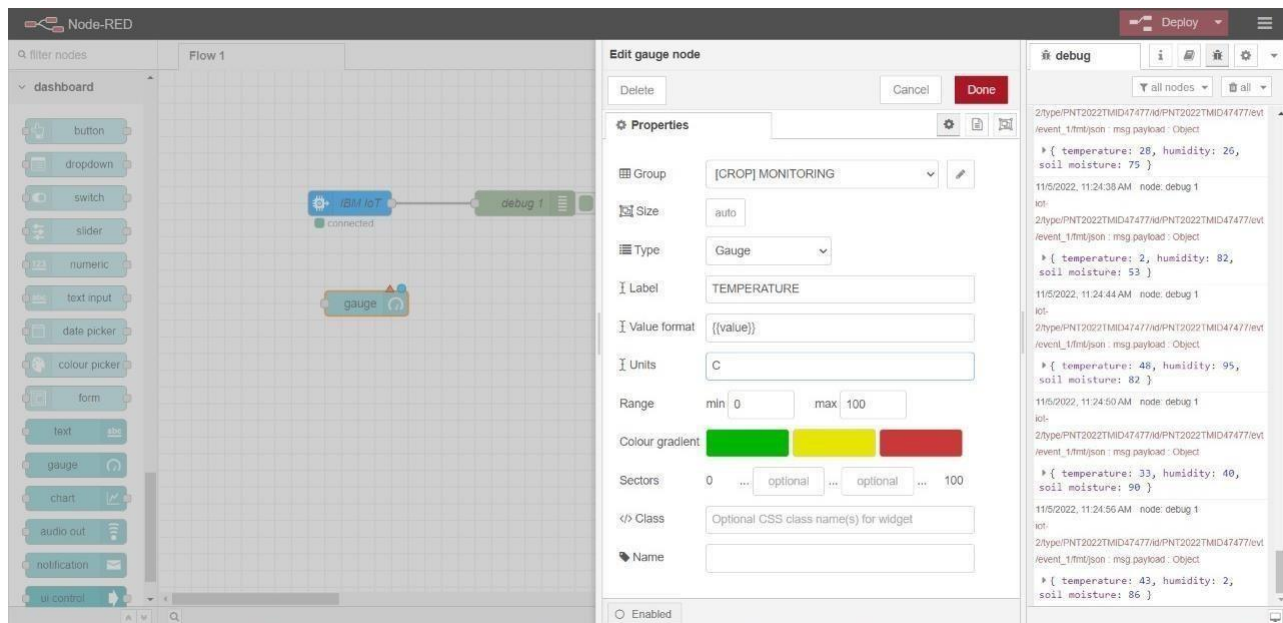
19 Nov 21:43:48 - [info] Starting flows
19 Nov 21:43:48 - [info] Started flows
```

STEP3: Connect IBM IOT in and Debug 1 and Deploy.



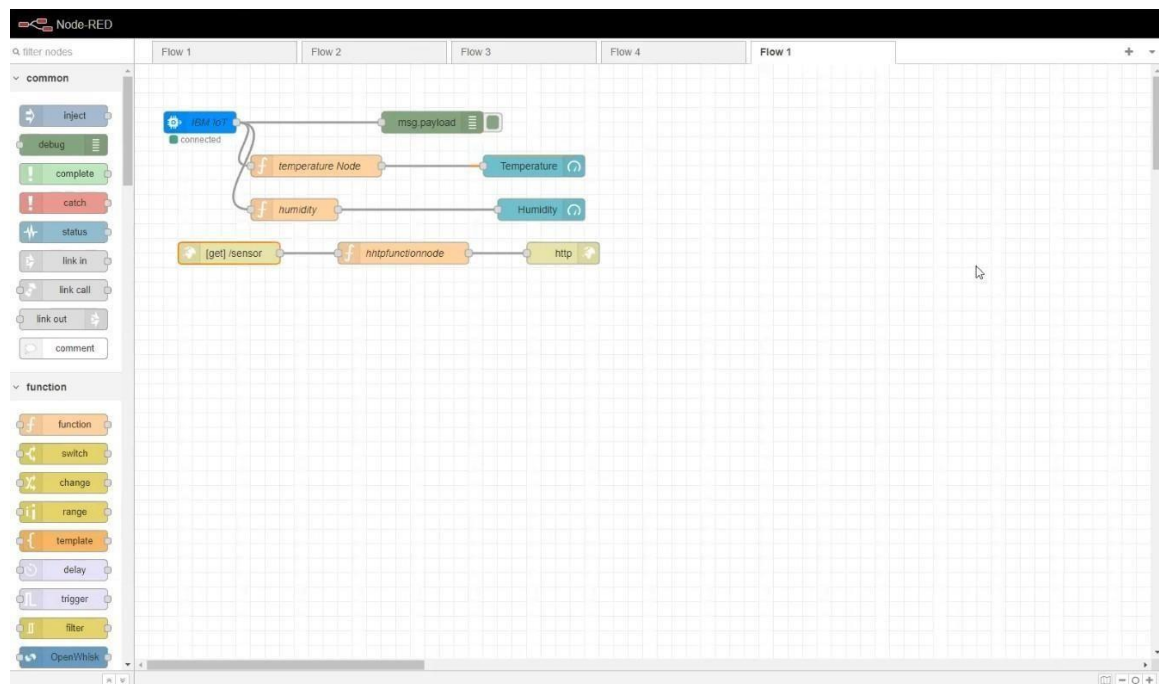
STEP4: Edit gauge node (Here the gauge nodes are named as Temperature, Humidity and Soil moisture).



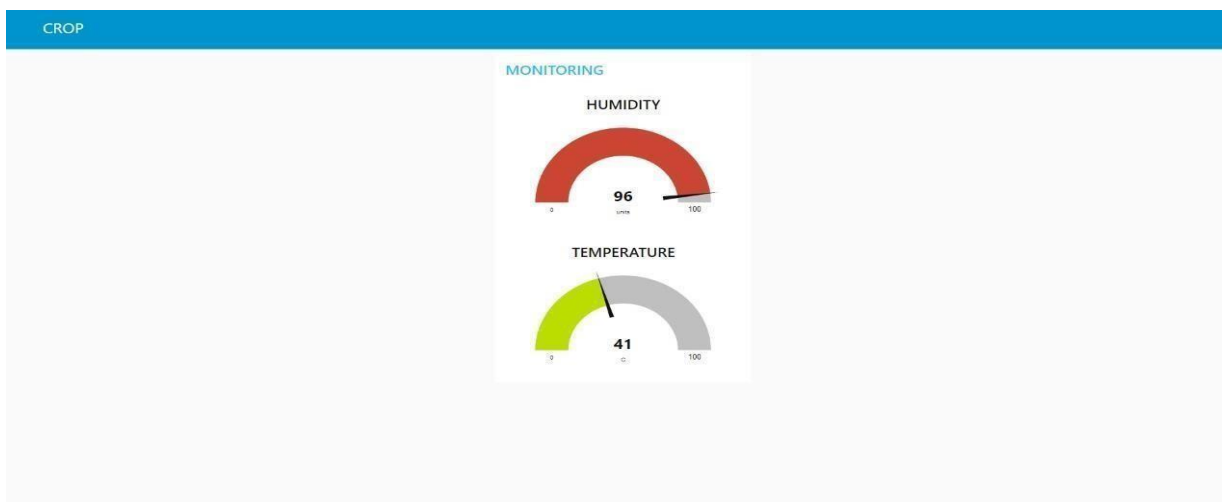
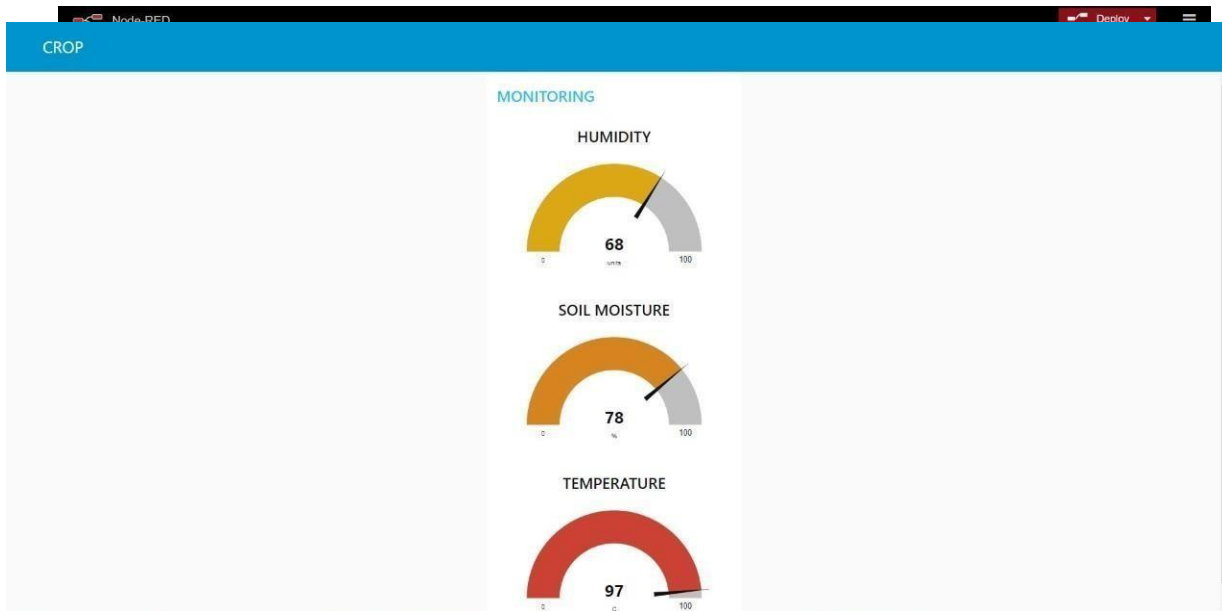


SIMULATION:

STEP1: Simulated program to get the random values.



STEP2: Generate debug message from IBM Watson IoT Platform and connect the nodes.



STEP3: Generate the some output from recent events

