


## SPRINT-2

|              |  |
|--------------|--|
| Date         | 16 November 2022                                       |
| TEAM ID      | PNT2022TMID51132                                       |
| Project Name | IoT Based smart crop Protection system for agriculture |
| Maximum mark | 20 marks   |

### STEP1: Download and Install NODE JS.



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#### Downloads


Latest LTS Version: 18.12.1 (includes npm 8.19.2)


Download the Node.js source code or a pre-built installer for your platform, and start developing today.

**LTS**  
Recommended For Most Users

**Current**  
Latest Features

  
Windows Installer  
node-v18.12.1-x64.msi

  
macOS Installer  
node-v18.12.1.pkg

  
Source Code  
node-v18.12.1.tar.gz

Windows Installer (.msi)  
Windows Binary (.zip)  
macOS Installer (.pkg)  
macOS Binary (.tar.gz)  
Linux Binaries (x64)

|                |        |
|----------------|--------|
| 32-bit         | 64-bit |
| 32-bit         | 64-bit |
| 64-bit / ARM64 |        |
| 64-bit         | ARM64  |
| 64-bit         |        |

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

```
node-red
4 Nov 18:48:05 - [info] Node-RED version: v3.0.2
4 Nov 18:48:05 - [info] Node.js version: v18.12.0
4 Nov 18:48:05 - [info] Windows_NT 10.0.19044 x64 LE
4 Nov 18:48:26 - [info] Loading palette nodes
4 Nov 18:48:44 - [info] Settings file : C:\Users\ELCOT\.node-red\settings.js
4 Nov 18:48:45 - [info] Context store : 'default' [module=memory]
4 Nov 18:48:45 - [info] User directory : \Users\ELCOT\.node-red
4 Nov 18:48:45 - [warn] Projects disabled : editorTheme.projects.enabled=false
4 Nov 18:48:45 - [info] Flows file : \Users\ELCOT\.node-red\flows.json
4 Nov 18:48:45 - [info] Creating new flow file
4 Nov 18:48:45 - [warn]

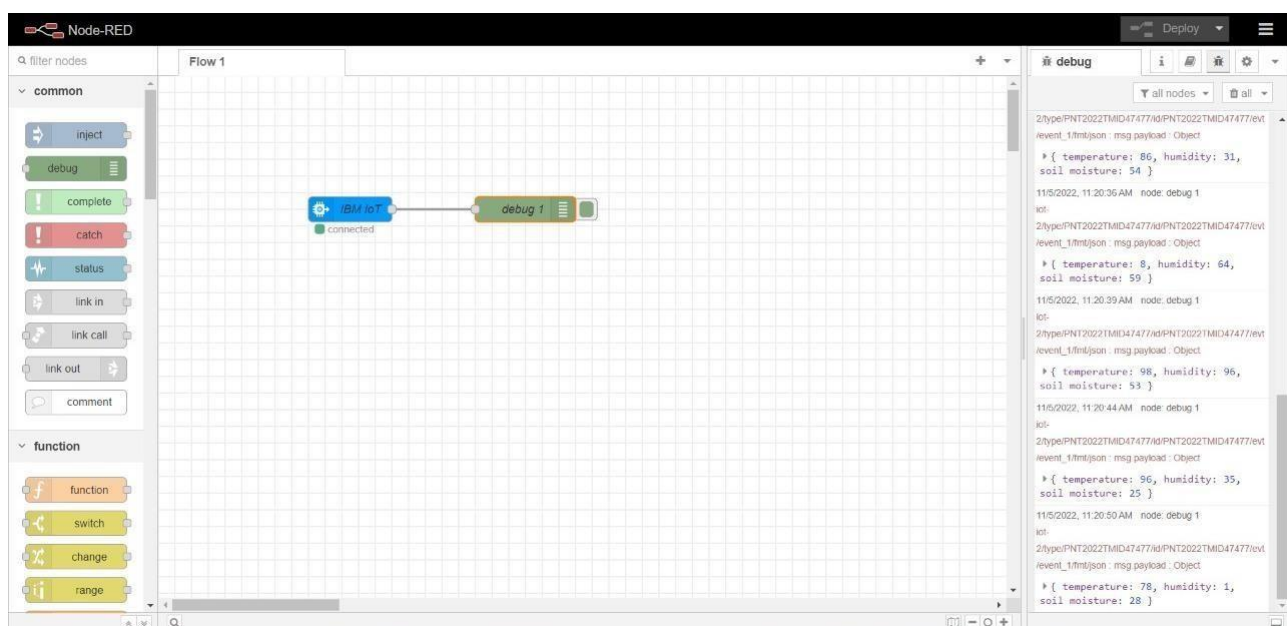
-----
Your flow credentials file is encrypted using a system-generated key.

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.
-----

4 Nov 18:48:45 - [warn] Encrypted credentials not found
4 Nov 18:48:45 - [info] Starting flows
4 Nov 18:48:46 - [info] Started flows
4 Nov 18:48:46 - [info] Server now running at http://127.0.0.1:1880/
```

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).

The screenshot shows the Node-RED interface with the 'Edit gauge node' panel open. The gauge is named 'gauge' and is part of the '[CROP PRODUCTION] MONITORIN' group. The value format is '{{value}}' and the units are 'units'. The range is set from 0 to 10. The color gradient is a gradient from green to yellow to red. The sectors are set to 0, optional, optional, and 10. The class is 'Optional CSS class name(s) for widget'.

The screenshot shows the Node-RED interface with the 'Edit gauge node' panel open. The gauge is named 'TEMPERATURE' and is part of the '[CROP] MONITORING' group. The value format is '{{value}}' and the units are 'C'. The range is set from 0 to 100. The color gradient is a gradient from green to yellow to red. The sectors are set to 0, optional, optional, and 100. The class is 'Optional CSS class name(s) for widget'. The 'Name' field is empty.