

---

# IoT임베디드오픈플랫폼

## 7주차 과제 - node.js

컴퓨터시스템과 C반 이정윤 201845092 이은선 202045080

---

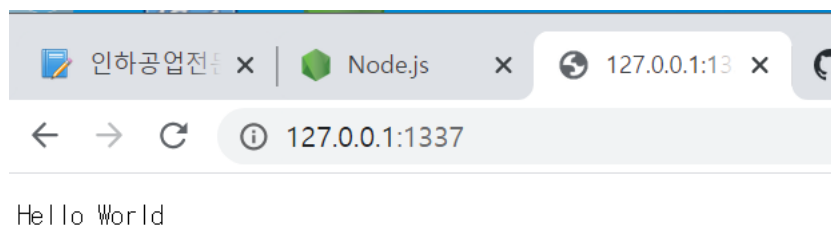
## 1. node.js 설치 / serialport 설치

```
C:\Users\Winhac>npm install serialport
npm notice
npm notice New minor version of npm available! 7.7.6 -> 7.9.0
npm notice Changelog: https://github.com/npm/cli/releases/tag/v7.9.0
npm notice Run npm install -g npm@7.9.0 to update!
npm notice

added 75 packages, and audited 76 packages in 5s

17 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
npm notice
npm notice New minor version of npm available! 7.7.6 -> 7.9.0
npm notice Changelog: https://github.com/npm/cli/releases/tag/v7.9.0
npm notice Run npm install -g npm@7.9.0 to update!
npm notice
```

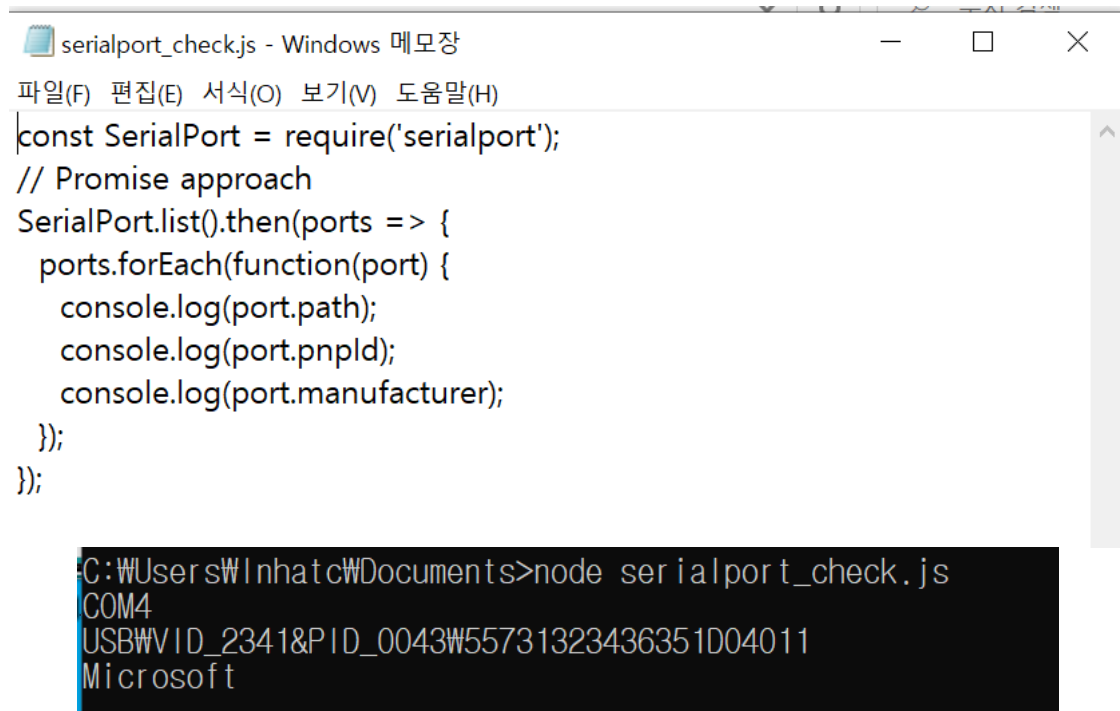


웹페이지로 Hello World 출력 성공

## 2. serialport 체크

```
C:\Users\Winhac\Documents>node serialport_check.js
C:\Users\Winhac\node_modules\serialport\stream\lib\index.js:651
  throw new TypeError('SerialPort.list no longer takes a callback and only returns a promise')
        ^
TypeError: SerialPort.list no longer takes a callback and only returns a promise
    at Function.SerialPort.list (C:\Users\Winhac\node_modules\serialport\stream\lib\index.js:651:11)
    at Object.<anonymous> (C:\Users\Winhac\Documents\serialport_check.js:2:12)
    at Module._compile (node:internal/modules/cjs/loader:1092:14)
    at Object.Module._extensions..js (node:internal/modules/cjs/loader:1121:10)
    at Module.load (node:internal/modules/cjs/loader:972:32)
    at Function.Module._load (node:internal/modules/cjs/loader:813:14)
    at Function.executeUserEntryPoint [as runMain] (node:internal/modules/run_main:76:12)
    at node:internal/main/run_main_module:17:47
```

기존 코드로 실행하면 이와같은 오류가 발생하여 코드를 수정했습니다



The screenshot shows a Windows Notepad window titled 'serialport\_check.js - Windows 메모장'. The menu bar includes '파일(F)', '편집(E)', '서식(O)', '보기(V)', and '도움말(H)'. The code in the editor is as follows:

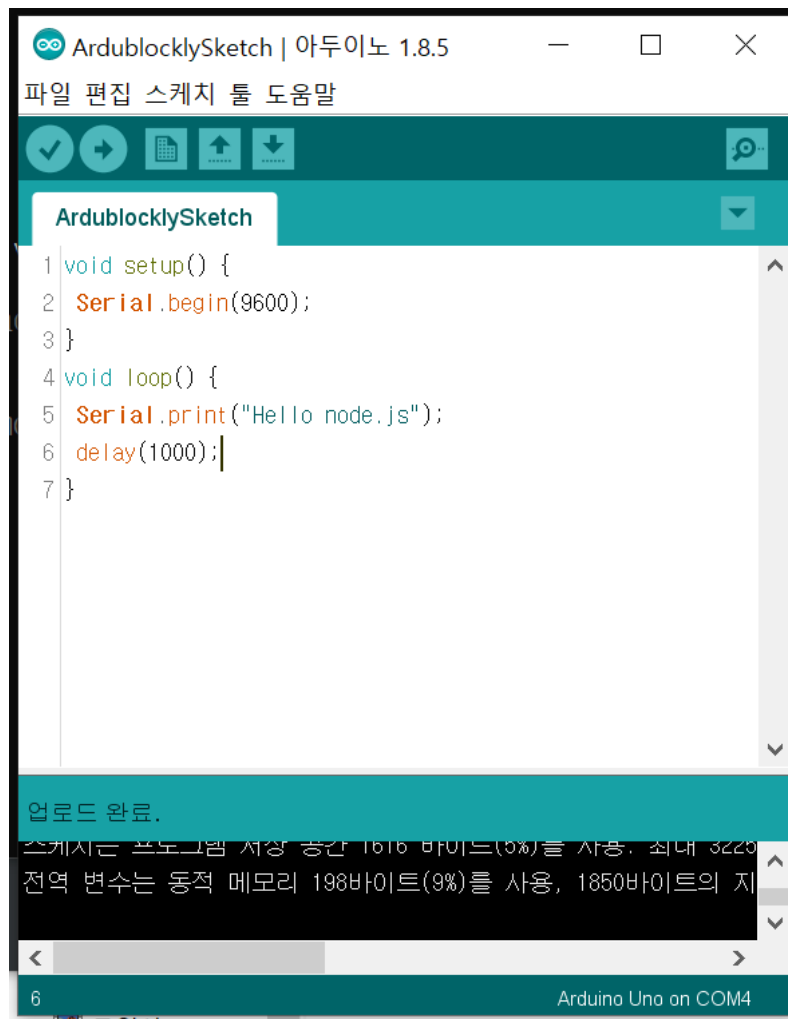
```
const SerialPort = require('serialport');
// Promise approach
SerialPort.list().then(ports => {
  ports.forEach(function(port) {
    console.log(port.path);
    console.log(port.pnpId);
    console.log(port.manufacturer);
  });
});
```

Below the code editor, a terminal window displays the output of running the script:

```
C:\Users\Winhate\Documents>node serialport_check.js
COM4
USBVID_2341&PID_0043W55731323436351D04011
Microsoft
```

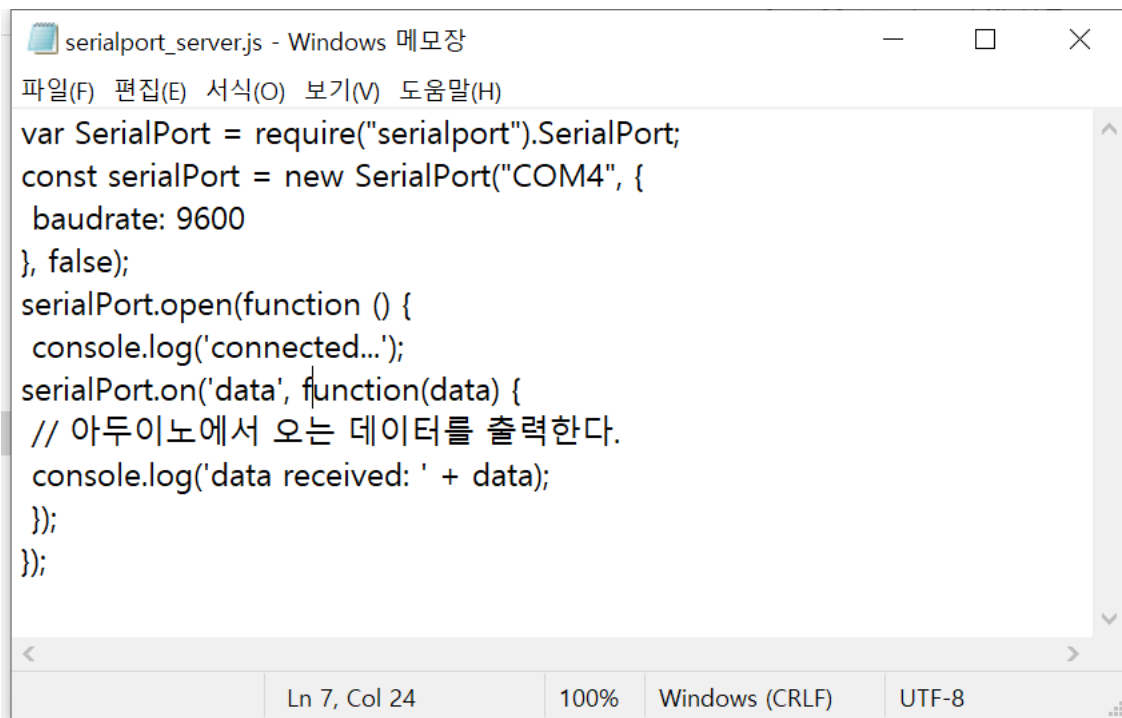
테스트 성공

### 3. 아두이노 코드 업로드



아두이노 업로드 성공

## 4. serialport\_server.js 파일 작성, 실행



```
serialport_server.js - Windows 메모장
파일(F) 편집(E) 서식(O) 보기(V) 도움말(H)
var SerialPort = require("serialport").SerialPort;
const serialPort = new SerialPort("COM4", {
  baudrate: 9600
}, false);
serialPort.open(function () {
  console.log('connected...');
  serialPort.on('data', function(data) {
    // 아두이노에서 오는 데이터를 출력한다.
    console.log('data received: ' + data);
  });
});
```

```
C:\Users\Winhatch\Documents\serialport_server.js:2
var serialPort = new SerialPort("COM4", {
                    ^
TypeError: SerialPort is not a constructor
    at Object.<anonymous> (C:\Users\Winhatch\Documents\serialport_server.js:2:18)
    at Module._compile (node:internal/modules/cjs/loader:1092:14)
    at Object.Module._extensions..js (node:internal/modules/cjs/loader:1121:10)
    at Module.load (node:internal/modules/cjs/loader:972:32)
    at Function.Module._load (node:internal/modules/cjs/loader:813:14)
    at Function.executeUserEntryPoint [as runMain] (node:internal/modules/run_main:76:12)
    at node:internal/main/run_main_module:17:47
```

코드를 작성하고 실행했으나 오류 발생.  
원인을 찾지 못한 상태에서 시간 부족으로 더 이상 진행하지 못했습니다.