

Practical no 5

Aim : Install node js and create a server using express js and

Theory : Install Node JS

Node.js can be installed in different ways. This post highlights the most common and convenient ones.

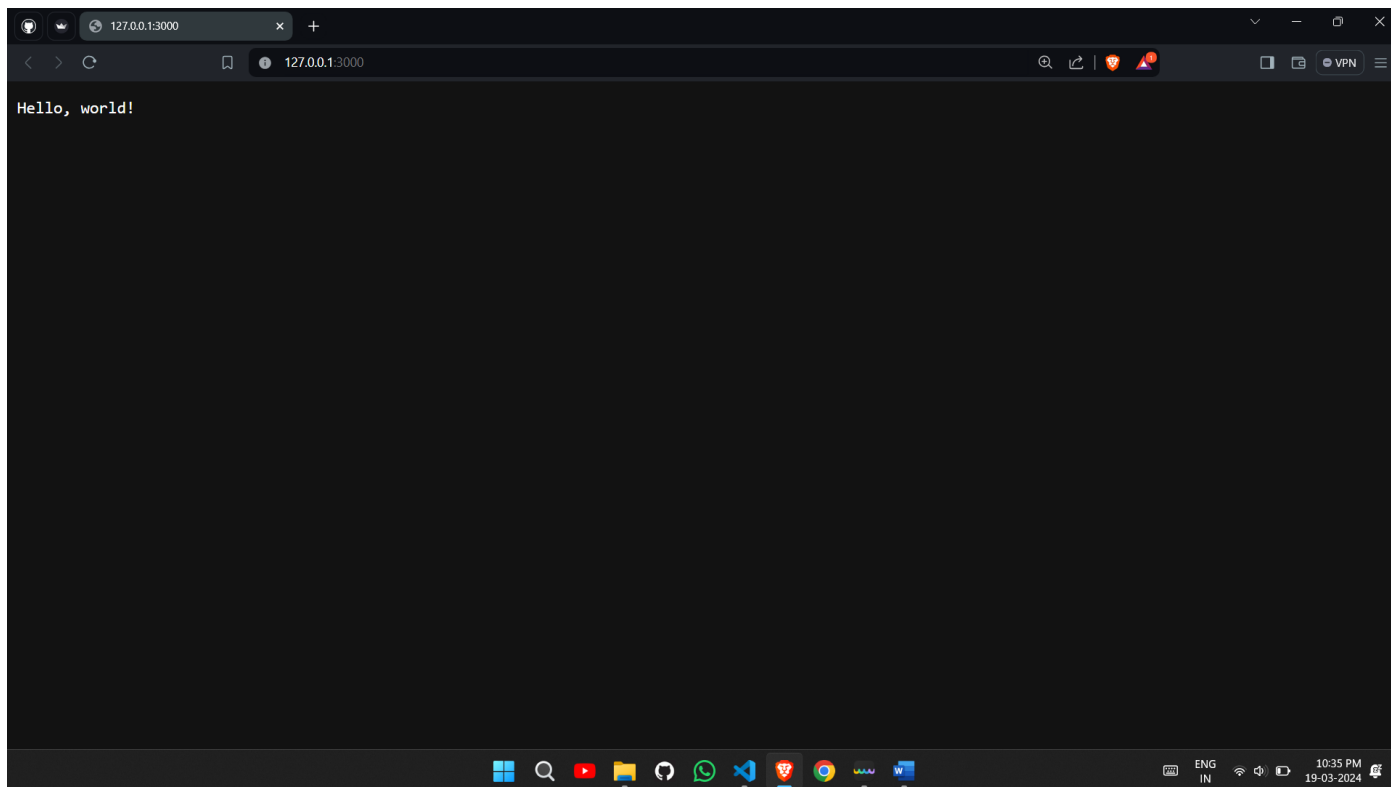
Official packages for all the major platforms are available at <https://nodejs.org/download/>.

nvm is a popular way to run Node.js. It allows you to easily switch the Node.js version, and install new

versions to try and easily rollback if something breaks. It is also very useful to test your code with old Node.js versions.

Code:

```
const http = require('http');
const hostname = '127.0.0.1';
const port = 3000;
const server = http.createServer((req, res) => {
  res.statusCode = 200;
  res.setHeader('Content-Type', 'text/plain');
  res.end('Hello, world!\n');
});
server.listen(port, hostname, () => {
  console.log(`Server running at http://${hostname}:${port}/`);
});
```



Yahoo Weather By [apishub](#) | Updated a year ago | [Weather](#)

Popularity: 9.8 / 10 | Latency: 1,583ms | Service Level: 99% | Health Check: N/A

Endpoints: [About](#) [Tutorials](#) [Discussions](#) [Pricing](#) [Subscribed](#)

Yahoo Free Weather APIs [Show more...](#)

V1 (Current)

Search endpoints

GET Search by location

GET Search by woeid

GET Search by geolocation latitude & longitude

GET Search by location

X-RapidAPI-Key: f5611a6a81mshe5bdced2ce8feb9p18d42fjsn8753b23

X-RapidAPI-Host: yahoo-weather5.p.rapidapi.com

Required Parameters

location: sunnyvale

Code Snippets

(Node.js) Axios

```
const axios = require('axios');

const options = {
  method: 'GET',
  url: 'https://yahoo-weather5.p.rapidapi.com/weather',
  params: {
    location: 'sunnyvale',
    format: 'json',
    u: 'f'
  },
  headers: {
    'X-RapidAPI-Key': 'f5611a6a81mshe5bdced2ce8feb9p18d42fjsn8753b236a731',
    'X-RapidAPI-Host': 'yahoo-weather5.p.rapidapi.com'
  }
}
```

Code :

```
const express = require('express');

const axios = require('axios');

const app = express();

const port = 3000;

app.get('/weather', async (req, res) => {

  try {

    const city = req.query.city;

    if (!city) {

      return res.status(400).json({ error: 'City parameter is required' });

    }

    const options = {

      method: 'GET',

      url: 'https://yahoo-weather5.p.rapidapi.com/weather',

      params: {

        location: city,
```

```
    format: 'json',
    u: 'f'
  },
  headers: {
    'X-RapidAPI-Key': 'f5611a6a81mshe5bdced2ce8feb9p18d42fjsn8753b236a731',
    'X-RapidAPI-Host': 'yahoo-weather5.p.rapidapi.com'
  }
};

const response = await axios.request(options);

    console.log("got the data");

    res.json(response.data);
  } catch (error) {

    console.error('Error fetching weather data:', error);

    res.status(500).json({ error: 'An error occurred while fetching weather data' });

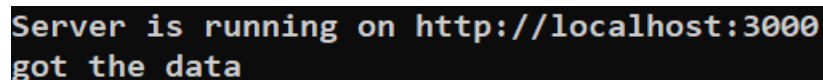
  }
});

app.listen(port, () => {

  console.log(`Server is running on http://localhost:${port}`);

});
```

OUTPUT:

A screenshot of a terminal window with a black background and white text. The text shows the server starting and successfully fetching data from the API.

```
Server is running on http://localhost:3000
got the data
```

Postman interface showing a successful GET request to `localhost:3000/weather?city=pune`. The response status is 200 OK, and the body contains a JSON object with weather data for Pune.

Query Params

Key	Value	Description
city	pune	

Body

```
1 {
2   "location": {
3     "city": "Pune",
4     "woeid": 2295412,
5     "country": "India",
6     "lat": 18.53611,
7     "long": 73.85218,
8     "timezone_id": "Asia/Kolkata"
9   },
10  "current_observation": {
11    "pubDate": 1706699844,
12    "wind": {
13      "chill": 88,
14      "direction": "WNW",
15      "speed": 10
16    },
17    "atmosphere": {
18      "humidity": 25,
19      "visibility": 9.81,
20      "pressure": 1016.9
```

Postman interface showing a failed GET request to `localhost:3000/weather`. The response status is 400 Bad Request, and the body contains an error message.

Query Params

Key	Value	Description
Key	Value	Description

Body

```
1 {
2   "error": "City parameter is required"
3 }
```

API Call : `localhost:3000/weather?city=pune`

Response JSON :

```
{
  "location": {
    "city": "Pune",
    "woeid": 2295412,
```

```
"country": "India",  
"lat": 18.53611,  
"long": 73.85218,  
"timezone_id": "Asia/Kolkata"  
},  
"current_observation": {  
  "pubDate": 1706699246,  
  "wind": {  
    "chill": 88,  
    "direction": "WNW",  
    "speed": 10  
  },  
  "atmosphere": {  
    "humidity": 25,  
    "visibility": 9.01,  
    "pressure": 1016.9  
  },  
  "astronomy": {  
    "sunrise": "7:08 AM",  
    "sunset": "6:28 PM"  
  },  
  "condition": {  
    "temperature": 90,  
    "text": "Sunny",  
    "code": 32  
  }  
}
```

```
},  
"forecasts": [  
  {  
    "day": "Wed",  
    "date": 1706716800,  
    "high": 90,  
    "low": 57,  
    "text": "Sunny",  
    "code": 32  
  },  
  {  
    "day": "Thu",  
    "date": 1706803200,  
    "high": 90,  
    "low": 57,  
    "text": "Mostly Sunny",  
    "code": 34  
  },  
  {  
    "day": "Fri",  
    "date": 1706889600,  
    "high": 86,  
    "low": 56,  
    "text": "Mostly Cloudy",  
    "code": 28  
  },  
]
```

```
{  
  "day": "Sat",  
  "date": 1706976000,  
  "high": 91,  
  "low": 59,  
  "text": "Mostly Cloudy",  
  "code": 28  
},
```

```
{  
  "day": "Sun",  
  "date": 1707062400,  
  "high": 93,  
  "low": 60,  
  "text": "Partly Cloudy",  
  "code": 30  
},
```

```
{  
  "day": "Mon",  
  "date": 1707148800,  
  "high": 91,  
  "low": 59,  
  "text": "Sunny",  
  "code": 32  
},
```

```
{  
  "day": "Tue",
```



```
"date": 1707235200,

"high": 79,

"low": 65,

"text": "Haze",

"code": 21

},

{

  "day": "Wed",

  "date": 1707321600,

  "high": 81,

  "low": 64,

  "text": "Sunny",

  "code": 32

},

{

  "day": "Thu",

  "date": 1707408000,

  "high": 84,

  "low": 65,

  "text": "Sunny",

  "code": 32

},

{

  "day": "Fri",

  "date": 1707494400,

  "high": 89,
```

```
    "low": 57,  
    "text": "Sunny",  
    "code": 32  
  },  
  {  
    "day": "Sat",  
    "date": 1707580800,  
    "high": 85,  
    "low": 55,  
    "text": "Sunny",  
    "code": 32  
  }  
]  
}
```

Conclusion :

Hence we have used yahoo Free API for weather data via Rapid API platform and used postman to trigger the API request.