

```
Administrator: Windows PowerShell
Windows PowerShell
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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\WINDOWS\system32> wsl --install
Downloading: Ubuntu
Installing: Ubuntu
An install, uninstall, or conversion is in progress for this distribution.
Error code: Wsl/InstallDistro/Service/RegisterDistro/0x8000000d
PS C:\WINDOWS\system32>
```

```
gayatri@DESKTOP-EKLTUA0: ~$ sudo passwd
Retype new password:
passwd: password updated successfully
Installation successful!
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 4.4.0-22621-Microsoft x86_64)

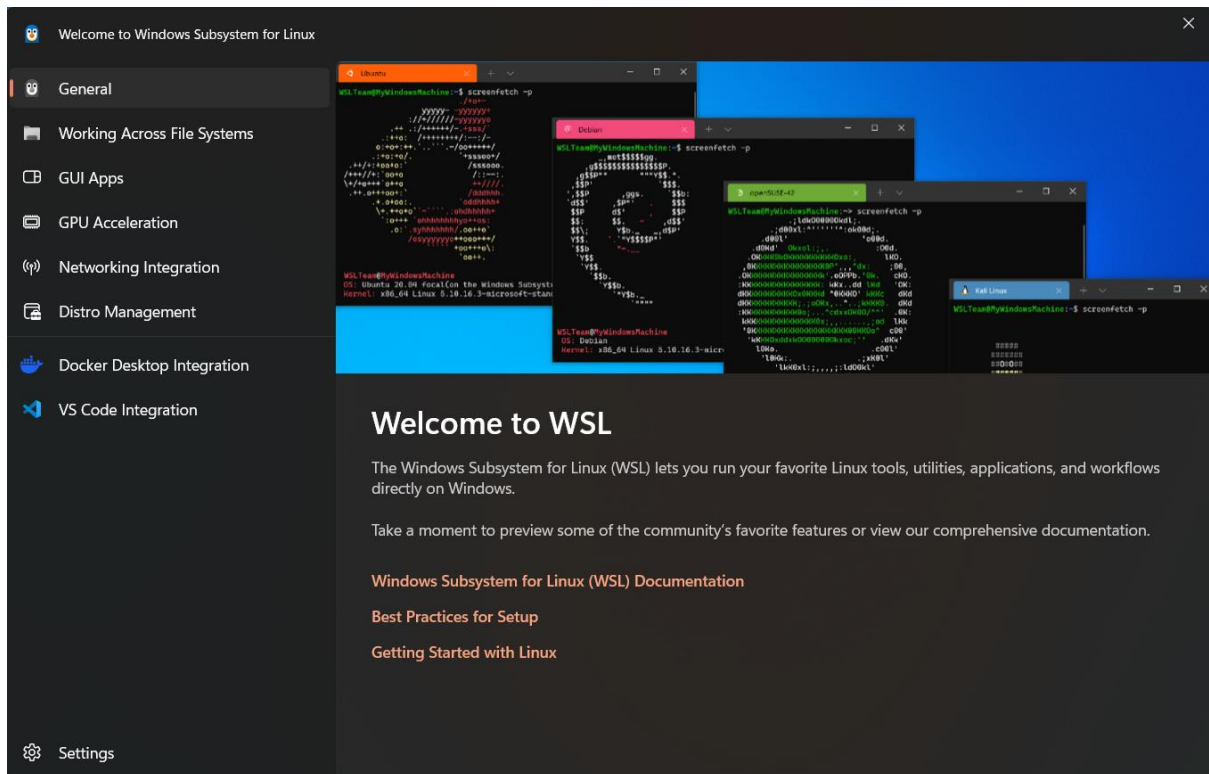
 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:        https://ubuntu.com/pro

System information as of Wed May 14 19:00:49 IST 2025

System load:          0.52
Usage of /home:        unknown
Memory usage:         58%
Swap usage:           0%
Users logged in:       0
IPv4 address for wifio: 192.168.201.126
IPv6 address for wifio: 2409:40c2:10:3c75:c81c:982b:52d0:f0f6
IPv6 address for wifio: 2409:40c2:10:3c75:590a:86f9:21fc:cf72

=> There were exceptions while processing one or more plugins. See
   /home/gayatri/.landscape/sysinfo.log for more information.

This message is shown once a day. To disable it please create the
/home/gayatri/.hushlogin file.
gayatri@DESKTOP-EKLTUA0:~$ S|
```



Part 2 : INSTALL TOOLS INSIDE WSL (Ubuntu)

```
gayatri@DESKTOP-EKLTUA0:~$ sudo apt update && sudo apt upgrade -y
[sudo] password for gayatri:
Hit:1 http://archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://security.ubuntu.com/ubuntu jammy-security InRelease [129 kB]
Get:3 http://archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]
Get:4 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [2311 kB]
Get:5 http://archive.ubuntu.com/ubuntu jammy-backports InRelease [127 kB]
Get:6 http://archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [14.1 MB]
Get:7 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [352 kB]
Get:8 http://security.ubuntu.com/ubuntu jammy-security/main amd64 c-n-f Metadata [13.6 kB]
Get:9 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [3366 kB]
Get:10 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [601 kB]
Get:11 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 c-n-f Metadata [624 B]
Get:12 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [974 kB]
Get:13 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [210 kB]
Get:14 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [21.7 kB]
Get:15 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [39.6 kB]
Get:16 http://security.ubuntu.com/ubuntu jammy-security/multiverse Translation-en [8716 B]
Get:17 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 c-n-f Metadata [368 B]
Get:18 http://archive.ubuntu.com/ubuntu jammy/universe Translation-en [5652 kB]
Get:19 http://archive.ubuntu.com/ubuntu jammy/universe amd64 c-n-f Metadata [286 kB]
Get:20 http://archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [217 kB]
Get:21 http://archive.ubuntu.com/ubuntu jammy/multiverse Translation-en [112 kB]
Get:22 http://archive.ubuntu.com/ubuntu jammy/multiverse amd64 c-n-f Metadata [8372 B]
Get:23 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [2556 kB]
Get:24 http://archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [416 kB]
Get:25 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 c-n-f Metadata [18.5 kB]
Get:26 http://archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [3485 kB]
Get:27 http://archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [620 kB]
Get:28 http://archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 c-n-f Metadata [676 B]
```

```
gayatri@DESKTOP-EKLTUA0:~$ curl -fsSL https://deb.nodesource.com/setup_18.x | sudo -E bash -
sudo apt install -y nodejs
node -v
npm -v
2025-05-14 21:34:08 - Installing pre-requisites
Hit:1 http://security.ubuntu.com/ubuntu jammy-security InRelease
Hit:2 http://archive.ubuntu.com/ubuntu jammy InRelease
Hit:3 http://archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:4 http://archive.ubuntu.com/ubuntu jammy-backports InRelease
Reading package lists... Done
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
ca-certificates is already the newest version (20240203~22.04.1).
ca-certificates set to manually installed.
curl is already the newest version (7.81.0-1ubuntu1.20).
curl set to manually installed.
gnupg is already the newest version (2.2.27-3ubuntu2.3).
gnupg set to manually installed.
The following NEW packages will be installed:
  apt-transport-https
0 upgraded, 1 newly installed, 0 to remove and 0 not upgraded.
Need to get 1510 B of archives.
After this operation, 170 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu jammy-updates/universe amd64 apt-transport-https all 2.4.13 [1510 B]
Fetched 1510 B in 1s (1635 B/s)
Selecting previously unselected package apt-transport-https.
(Reading database ... 42598 files and directories currently installed.)
Preparing to unpack .../apt-transport-https_2.4.13_all.deb ...
Unpacking apt-transport-https (2.4.13) ...
gayatri@DESKTOP-EKLTUA0:~$ sudo apt install git
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
git is already the newest version (1:2.34.1-1ubuntu1.12).
git set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
gayatri@DESKTOP-EKLTUA0:~$
```

PART 3: PROJECT SETUP USING EXPRESS.JS

```
gayatri@DESKTOP-EKLTUA0:~$ mkdir secure-backend && cd secure-backend
npm init -y
Wrote to /home/gayatri/secure-backend/package.json:

{
  "name": "secure-backend",
  "version": "1.0.0",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "keywords": [],
  "author": "",
  "license": "ISC",
  "description": ""
}

gayatri@DESKTOP-EKLTUA0:~/secure-backend$ npm install express mongoose bcrypt jsonwebtoken dotenv nodemailer cors
npm install --save-dev nodemon
added 103 packages, and audited 104 packages in 15s

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

found 0 vulnerabilities

added 26 packages, and audited 130 packages in 6s

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

found 0 vulnerabilities
```

```
GNU nano 6.2 index.js *
const express = require('express');
const app = express();
const cors = require('cors');
require('dotenv').config();

app.use(express.json());
app.use(cors());

app.get('/', (req, res) => {
  res.send('Backend is running securely!');
});

const PORT = process.env.PORT || 5000;
app.listen(PORT, () => console.log(`Server started on port ${PORT}`));
```

Help Exit Write Out Read File Where Is Replace Cut Paste Execute Justify Location Go To Line Undo Redo Set Mark Copy

Connect to Cluster0

1

2

3

Set up connection security

Choose a connection method

Connect

You need to secure your MongoDB Atlas cluster before you can use it. Set which users and IP addresses can access your cluster now. [Read more](#)

1. Add a connection IP address

Add Your Current IP Address

Add a Different IP Address

Allow Access from Anywhere

2. Create a database user

This first user will have [atlasAdmin](#) permissions for this project.

You'll need your database user's credentials in the next step. Copy the database user password.

Username

gayatri

Password

2004@%Gayatri

HIDE

Copy

Create Database User

Close

Choose a connection method

Add IP Access List Entry

Atlas only allows client connections to a cluster from entries in the project's IP Access List. Each entry should either be a single IP address or a CIDR-notated range of addresses. [Learn more](#)

ADD CURRENT IP ADDRESS

ALLOW ACCESS FROM ANYWHERE

Access List Entry:

0.0.0.0/0

Comment:

Optional comment describing this entry



This entry is temporary and will be deleted in

6 hours

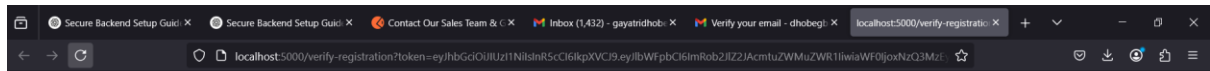
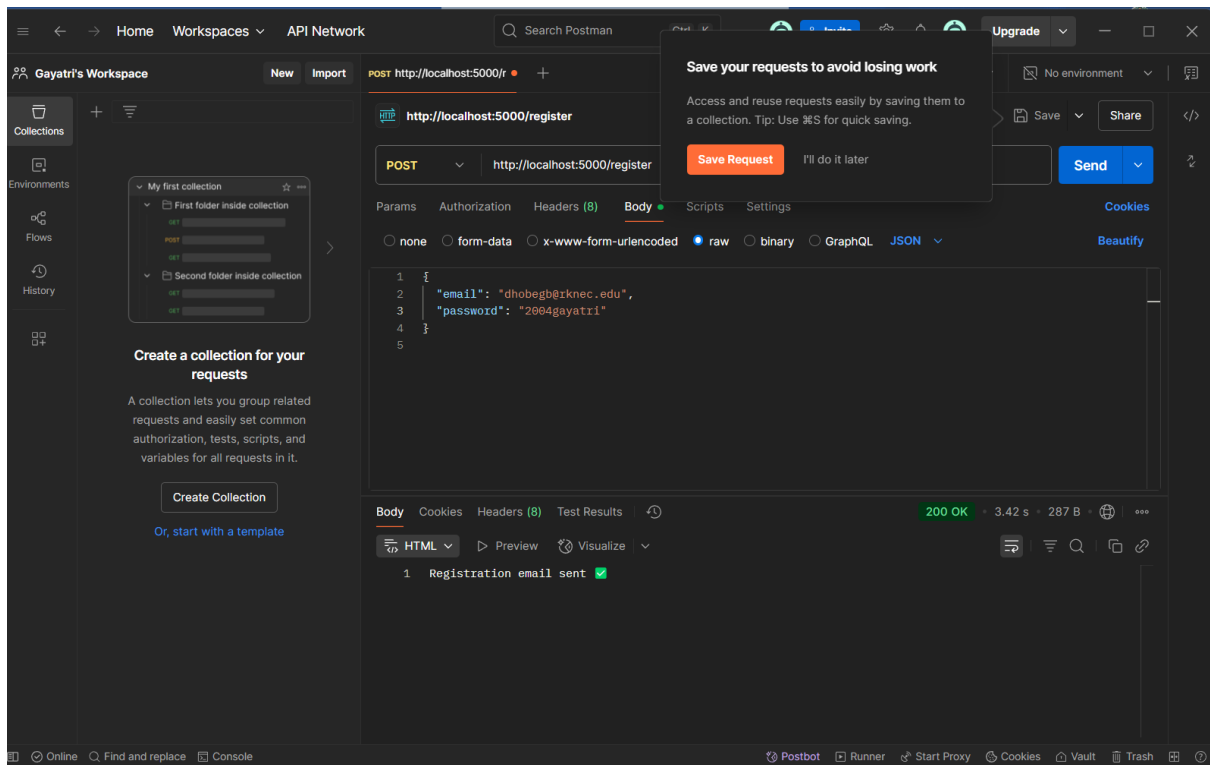
Cancel

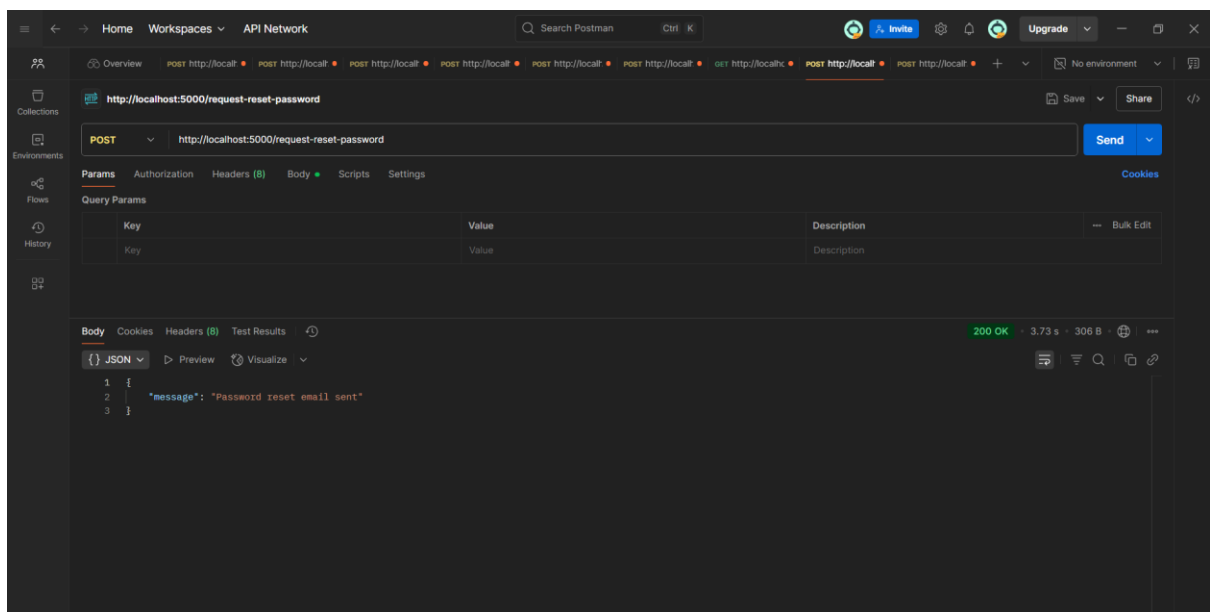
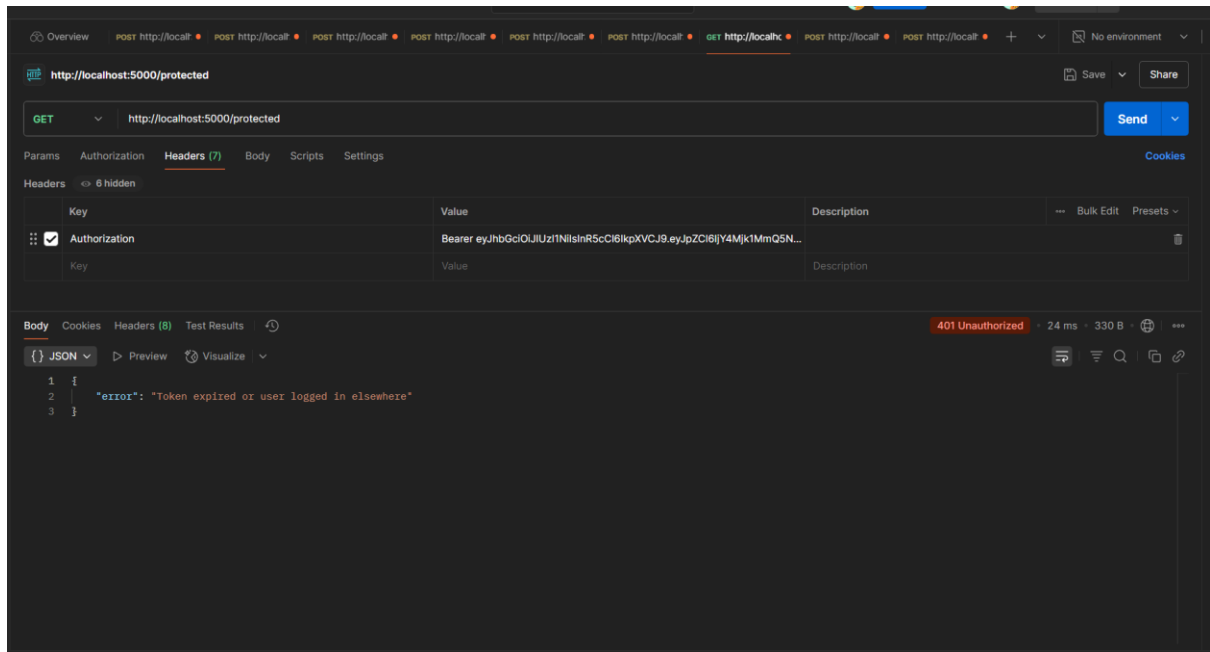
Confirm

```
jayatri@DESKTOP-EKLTUA0:~/secure-backend$ nano .env
jayatri@DESKTOP-EKLTUA0:~/secure-backend$ node index.js
Server running on port 5000
MongoDB connected
```

The screenshot shows the Postman API client interface. The top navigation bar includes 'Home', 'Workspaces', and 'API Network'. The main workspace is titled 'Gayatri's Workspace' and contains two collections: 'My first collection' and 'Second folder inside collection'. The 'Untitled Request' editor is active, showing a 'GET' method and a 'Send' button. The 'Params' tab is selected, displaying a table for 'Query Params' with columns for 'Key', 'Value', and 'Description'. The 'Response' tab is also visible, showing a placeholder for the response data.

Key	Value	Description
Key	Value	Description





HomeWorkspacesAPI Network

Search PostmanCtrl K

Invite

Upgrade

Overview

POST http://localhost

POST http://localhost

POST http://localhost

POST http://localhost

POST http://localhost

POST http://localhost

POST http://localhost

GET http://localhost

POST http://localhost

POST http://localhost

+

No environment

http://localhost:5000/reset-password/eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6IjY4Mjk1MmQ5NjY5NiIsImJAwMTRmZmVhYSIsImhkdCI6MTc0NzkzMzA1MCwiZXNwIjoxNzQ3OTMzOTUwIQAeIiB...

Save

Share

</>

POST

http://localhost:5000/reset-password/eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpZCI6IjY4Mjk1MmQ5NjY5NiIsImJAwMTRmZmVhYSIsImhkdCI6MTc0NzkzMzA1MCwiZXNwIjoxNzQ3OTMzOTUwIQAeIiB...

Send

Params

Authorization

Headers (8)

Body

Scripts

Settings

Cookies

Query Params

Key	Value	Description	Bulk Edit
Key	Value	Description	

Body

Cookies

Headers (8)

Test Results

200 OK

355 ms

306 B

JSON

Preview

Visualize

```
1 {
2   "message": "Password reset successful"
3 }
```