

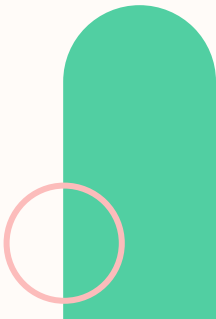
Purwadhika Digital Technology School

Installation Guide

Job Connector Program

Overview

- Vscode
- Nodejs
- Git
- Github
- Postman
- Mysql
- Docker
- Terminal

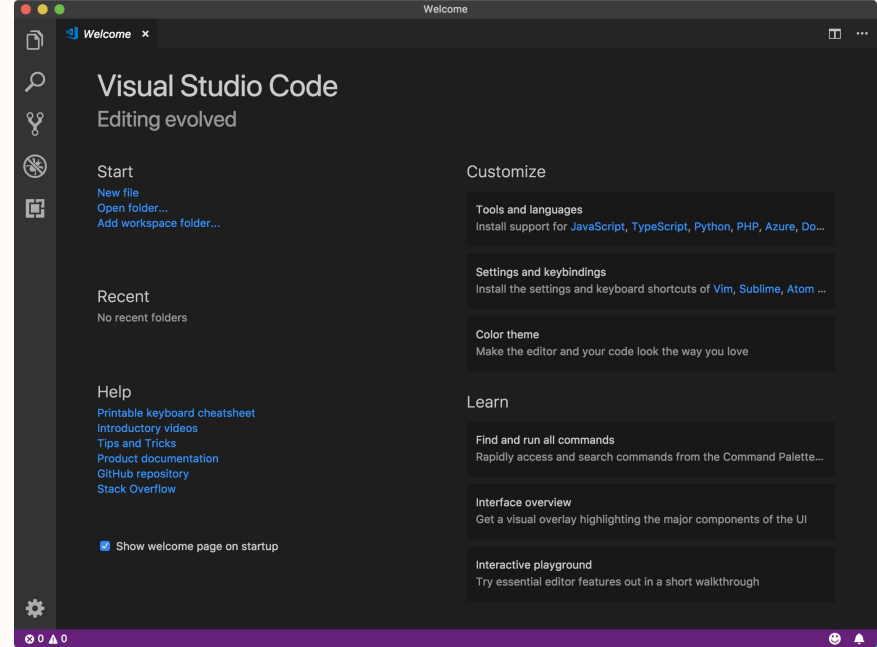


VS Code (Visual Studio Code)

VS code is one of most using code editor alongs software developer.

Download : <https://code.visualstudio.com/download>

If you are already familiar with another code editor , that's fine. But we recommended this code editor because we are using it in lecturing process so we could follow materi easily.



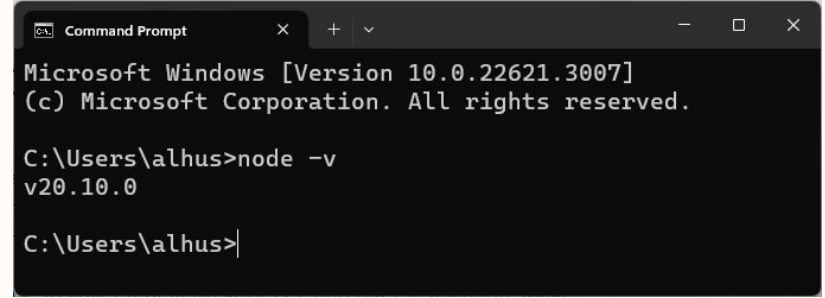
Nodejs

Nodejs is a javascript runtime build on chrome v8 javascript engine.

Download : <https://nodejs.org/en/download/current>

Choose installer that fit on your OS. and after installation. Make sure your node js run on terminal or command prompt.

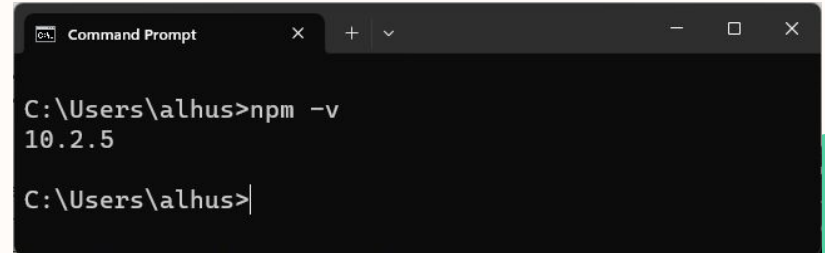
also , you can run this command, to make sure npm is installed



```
Command Prompt
Microsoft Windows [Version 10.0.22621.3007]
(c) Microsoft Corporation. All rights reserved.

C:\Users\alhus>node -v
v20.10.0

C:\Users\alhus>
```



```
Command Prompt

C:\Users\alhus>npm -v
10.2.5

C:\Users\alhus>
```

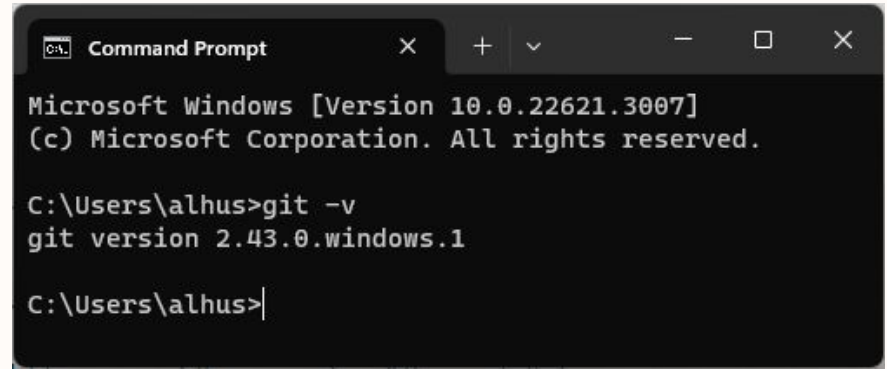
Git

Git is a version control system. Is a tools for collaborative system.

Download : <https://git-scm.com/download/win>

Choose installer that fit on your OS computer. After installation, Make sure git is run on your command prompt or terminal.

We use git on terminal or command prompt, so make sure you know how to use terminal , we cover it later



```
Command Prompt
Microsoft Windows [Version 10.0.22621.3007]
(c) Microsoft Corporation. All rights reserved.

C:\Users\alhus>git -v
git version 2.43.0.windows.1

C:\Users\alhus>
```

Github

Is one of git repository system hosting service. We share our git repository after we made it in local computer here. We do collaboration system in github. So , in this session we should make account on github.com.

This is the register link : <https://github.com/signup>

After registration and verification , we can check our github profile , for example :

<https://github.com/your-username>

Alternative: gitlab , bitbucket

Postman

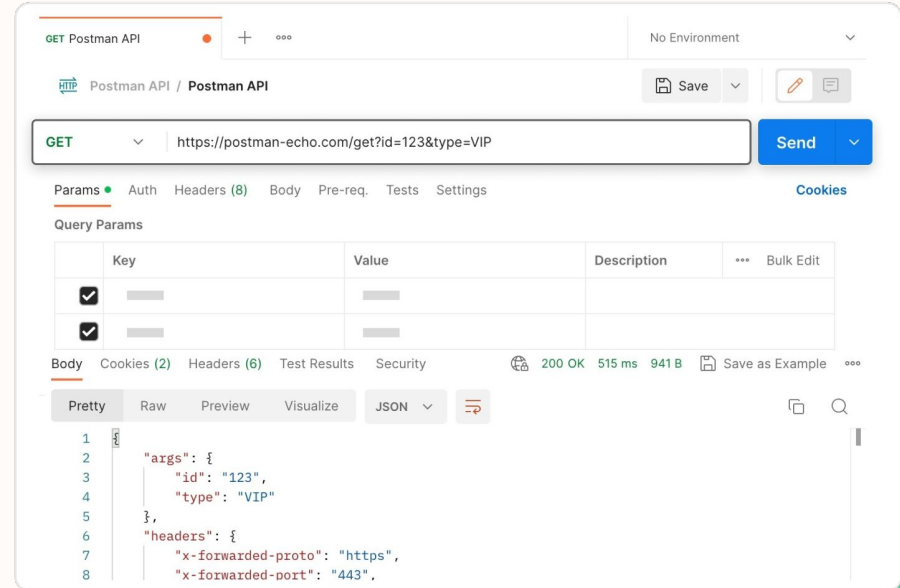
Postman is an API(application programming interface) development tool which helps to build, test and modify APIs.

Download : <https://www.postman.com/>

Choose the download link (installer) that fit on your OS.

If postman too heavy on your computer, use the alternative like insomnia.

Download: <https://insomnia.rest/download>



Mysql

Mysql is a software that store the data like table that have relation each other. This is where the data stored from software.

Download : <https://dev.mysql.com/downloads/installer/>

For mysql , there are plenty of DBMS (Database management system) tools. For example :

- Mysql Workbench : <https://dev.mysql.com/downloads/workbench/>

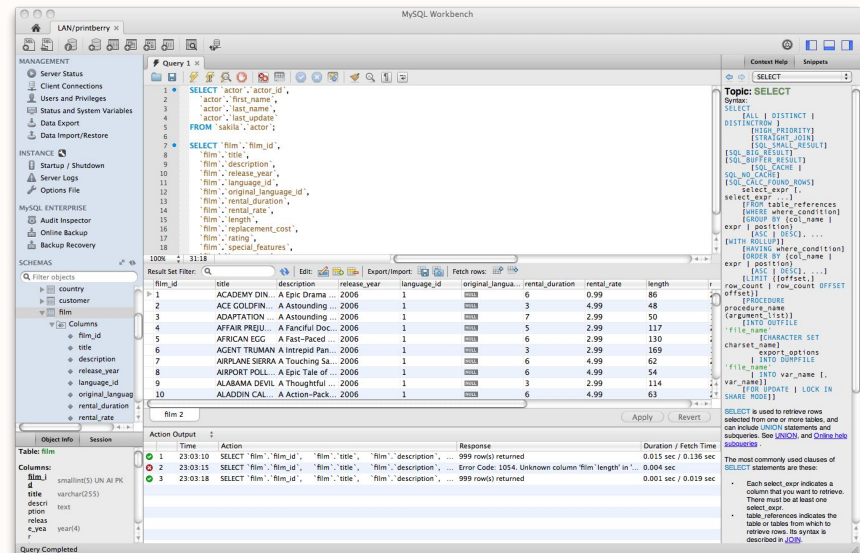
This is the recommended one

- DBeaver : <https://dbeaver.io/download/>

Choose installer that fit on your OS computer. Install mysql driver

- Phpmyadmin : <https://www.apachefriends.org/download.html>

Choose installer that fit on your OS computer. Activate XAMPP, run apache and mysql (click start on both button) . after that open <http://localhost/phpmyadmin>

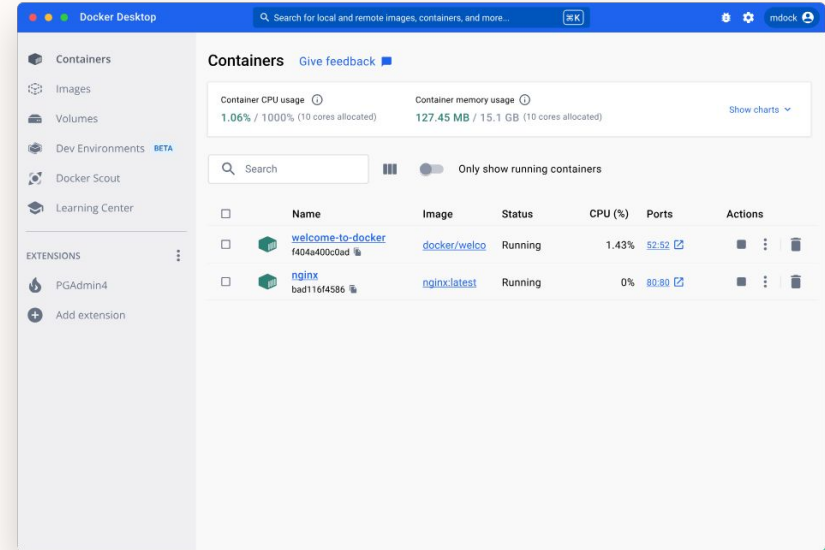


Docker

Docker is a containerization tool. It's different from virtualization. The purpose of this tool is we can run any application without worry about what operating system we are at

Tutorial :

https://docs.google.com/presentation/d/1HOYi3-e2zDfY8Ap5D3E1mAYJ9w4K4pQWMXrWx5ja_-M/edit?usp=sharing



Terminal

Terminal is command line interpreter that use to execute command and the result is below the command line that we write. Like Tsubasa said “ball is a friend” , as programmer a “terminal is a friend”

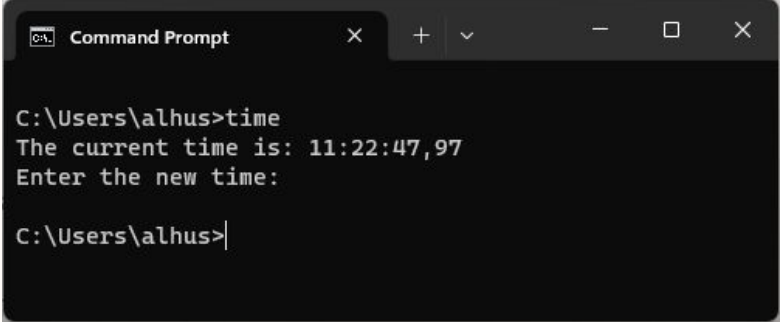
How to use the terminal command ? just type the command and enter. The result is shown below.

In this section, we use windows terminal. There are 2 terminal tools from windows, and 1 from git (git Bash) .

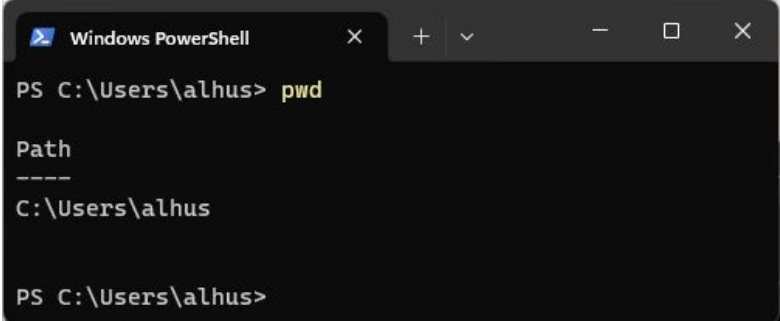
Terminal tools from windows:

- Command Prompt
- Windows Supershell (Powershell)

The difference between this two are some of the command is different. For mac terminal, the command is same as powershell. So , we use the powershell terminal for materi purpose

A screenshot of a Windows Command Prompt window. The title bar says "Command Prompt". The command prompt shows the user at the C:\Users\alhus directory. They have entered the command 'time', and the output is 'The current time is: 11:22:47,97'. Below that, it says 'Enter the new time:' and then shows the prompt 'C:\Users\alhus>' with a cursor.

```
C:\Users\alhus>time
The current time is: 11:22:47,97
Enter the new time:
C:\Users\alhus>|
```

A screenshot of a Windows PowerShell window. The title bar says "Windows PowerShell". The command prompt shows the user at the C:\Users\alhus directory. They have entered the command 'pwd', and the output is 'C:\Users\alhus'. Below that, it says 'Path' and '----'. Then it shows the prompt 'PS C:\Users\alhus>' with a cursor.

```
PS C:\Users\alhus> pwd

Path
----
C:\Users\alhus

PS C:\Users\alhus>
```

Terminal - List Directory

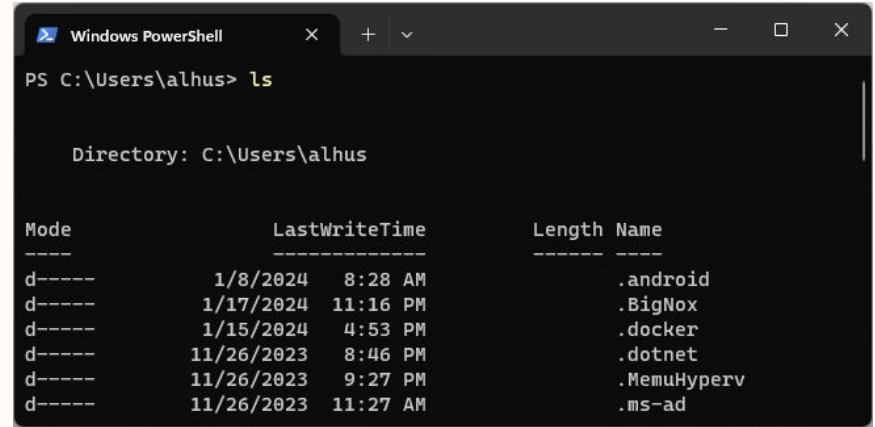
If you open the terminal , you are inside path directory. Just like you open explorer, there is certain folder or files inside it. But , you cannot see what inside that directory in terminal, so you should execute this command .

Ls = list

The result of course different in your computer. If we look at the result, there are folders and files in there.

If the terminal you use command prompt , you can use : **dir**

The purpose is same



```
Windows PowerShell
PS C:\Users\alhus> ls

Directory: C:\Users\alhus

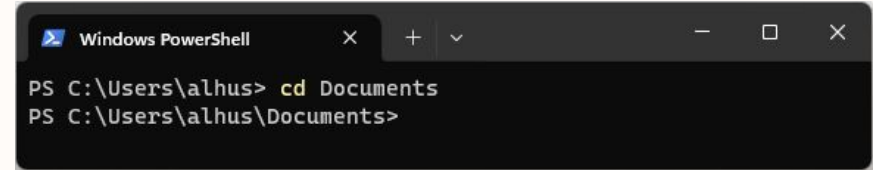
Mode                LastWriteTime         Length Name
----                -
d-----            1/8/2024   8:28 AM                .android
d-----            1/17/2024  11:16 PM                .BigNox
d-----            1/15/2024   4:53 PM                .docker
d-----            11/26/2023   8:46 PM                .dotnet
d-----            11/26/2023   9:27 PM                .MemuHyperv
d-----            11/26/2023  11:27 AM                .ms-ad
```

Terminal - Change Directory

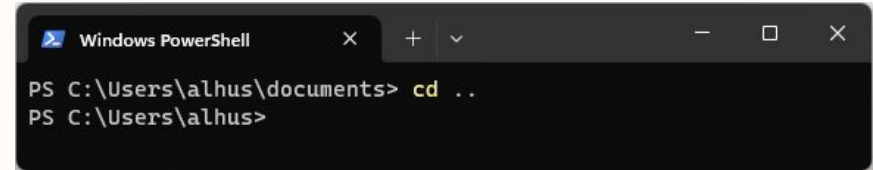
We want made project , but not in the directory we want . so we should change directory or change drive (if our computer had multiple drive in it. in mac, we dont had multiple drive unless we connected to external hard drive)

To change directory : **cd the-name-of-directory**

Means we move to sub directory / folder . to change to parent directory : **cd ..**



```
Windows PowerShell
PS C:\Users\alhus> cd Documents
PS C:\Users\alhus\Documents>
```



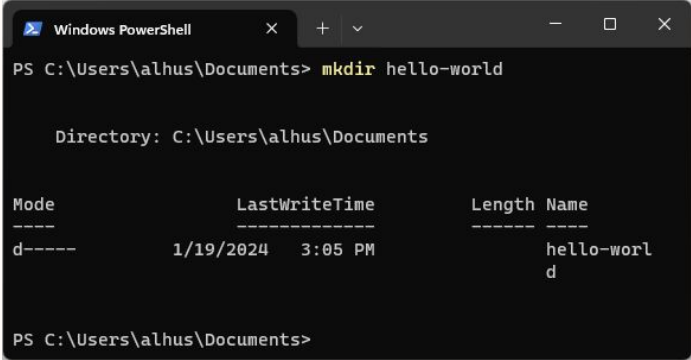
```
Windows PowerShell
PS C:\Users\alhus\documents> cd ..
PS C:\Users\alhus>
```

Terminal - make directory

Lets make folder inside Documents directory (folder) . to do it : **mkdir name-of-the-folder**

Then open the explorer (in mac its called Finder) , open document directory , look at the result

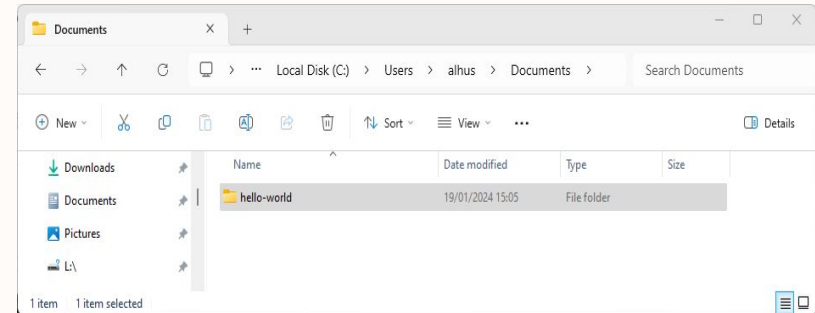
As you can see, anything we can do in terminal , its the same activity we can do in explorer.



```
Windows PowerShell
PS C:\Users\alhus\Documents> mkdir hello-world

Directory: C:\Users\alhus\Documents

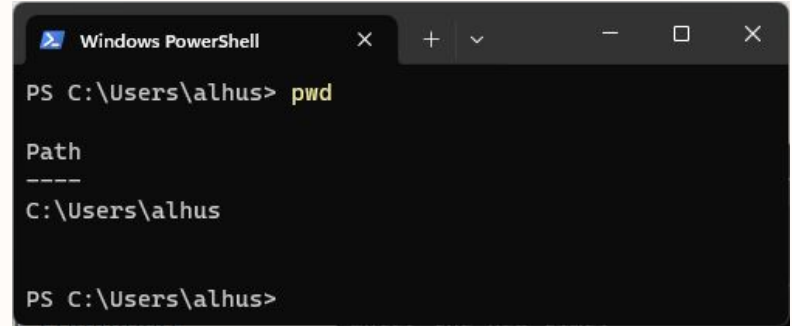
Mode                LastWriteTime         Length Name
----                -
d-----          1/19/2024   3:05 PM             hello-world
```



Terminal - Print Working Directory

Sometimes, in mac , we cannot sure . where path we are now in terminal. The command we can executed to knows what path we are in is : **pwd**

Pwd stand for Print Working Directory

A screenshot of a Windows PowerShell terminal window. The title bar shows 'Windows PowerShell' with standard window controls. The terminal text shows the command 'pwd' being executed at the prompt 'PS C:\Users\alhus>'. The output is 'Path' followed by a separator '----' and the directory path 'C:\Users\alhus'. The prompt returns to 'PS C:\Users\alhus>'.

```
Windows PowerShell
PS C:\Users\alhus> pwd

Path
----
C:\Users\alhus

PS C:\Users\alhus>
```

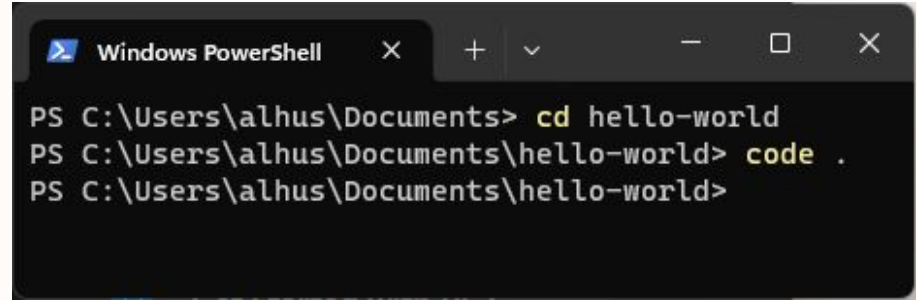
Terminal - open VS code

After vscode installation , we can open vscode from terminal. We can just write “**code .**” then execute the command, the vscode application will show up.

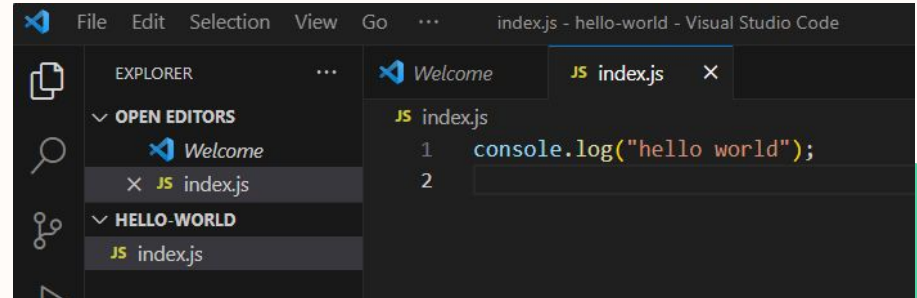
Lets pointing our path directory to hello-world folder that we already created. And open the vscode : “**code .**”

Then , the vscode open exactly in the folder hello-world. Thats how programmers open vscode pointing out their project folder.

After that, create file index.js then write that code.



```
Windows PowerShell
PS C:\Users\alhus\Documents> cd hello-world
PS C:\Users\alhus\Documents\hello-world> code .
PS C:\Users\alhus\Documents\hello-world>
```



```
index.js - hello-world - Visual Studio Code
EXPLORER
  OPEN EDITORS
    Welcome
    JS index.js
  HELLO-WORLD
    JS index.js
JS index.js
1 console.log("hello world");
2
```

Terminal - Execute that code

If you already write code in index.js , just execute index.js file : **node index.js**

Just made sure , you already in the right path to execute the code. If you are not in the right path where index.js was, the execute will fail , because file not found or not in there.

If you are not sure where index.js was, execute ls inside folder hello-world. If the file shown there , then you can execute the code

```
Windows PowerShell
PS C:\Users\alhus\Documents\hello-world> ls

Directory: C:\Users\alhus\Documents\hello-world

Mode                LastWriteTime         Length Name
----                -
-a-----         1/19/2024   3:20 PM           29 index.js

PS C:\Users\alhus\Documents\hello-world>
```

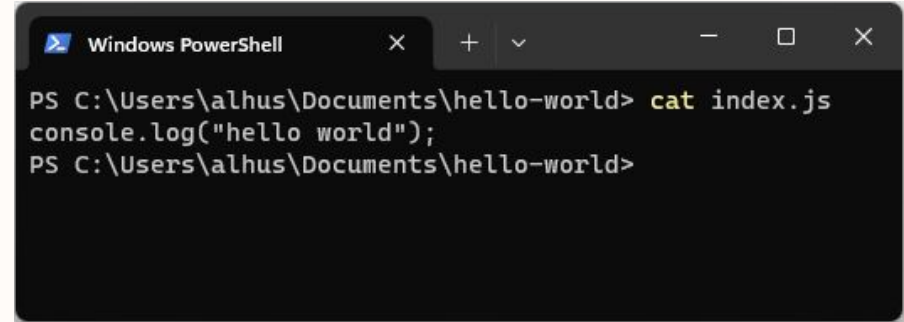
```
Windows PowerShell
PS C:\Users\alhus\Documents\hello-world> node index.js
hello world
PS C:\Users\alhus\Documents\hello-world>
```


Terminal - read file without using editor

Imagine you want quick read the file inside folder, not want to opening any editor.

Just execute this command : `cat name-file.extension`

As you can see we can look at what is written in `index.js`

A screenshot of a Windows PowerShell terminal window. The title bar at the top says "Windows PowerShell" with standard window controls (close, maximize, minimize). The terminal shows a command prompt at "PS C:\Users\alhus\Documents\hello-world>". The user has entered the command "cat index.js", and the output displayed is "console.log('hello world');". The prompt is now at "PS C:\Users\alhus\Documents\hello-world>".

```
Windows PowerShell
PS C:\Users\alhus\Documents\hello-world> cat index.js
console.log("hello world");
PS C:\Users\alhus\Documents\hello-world>
```

Thank You

