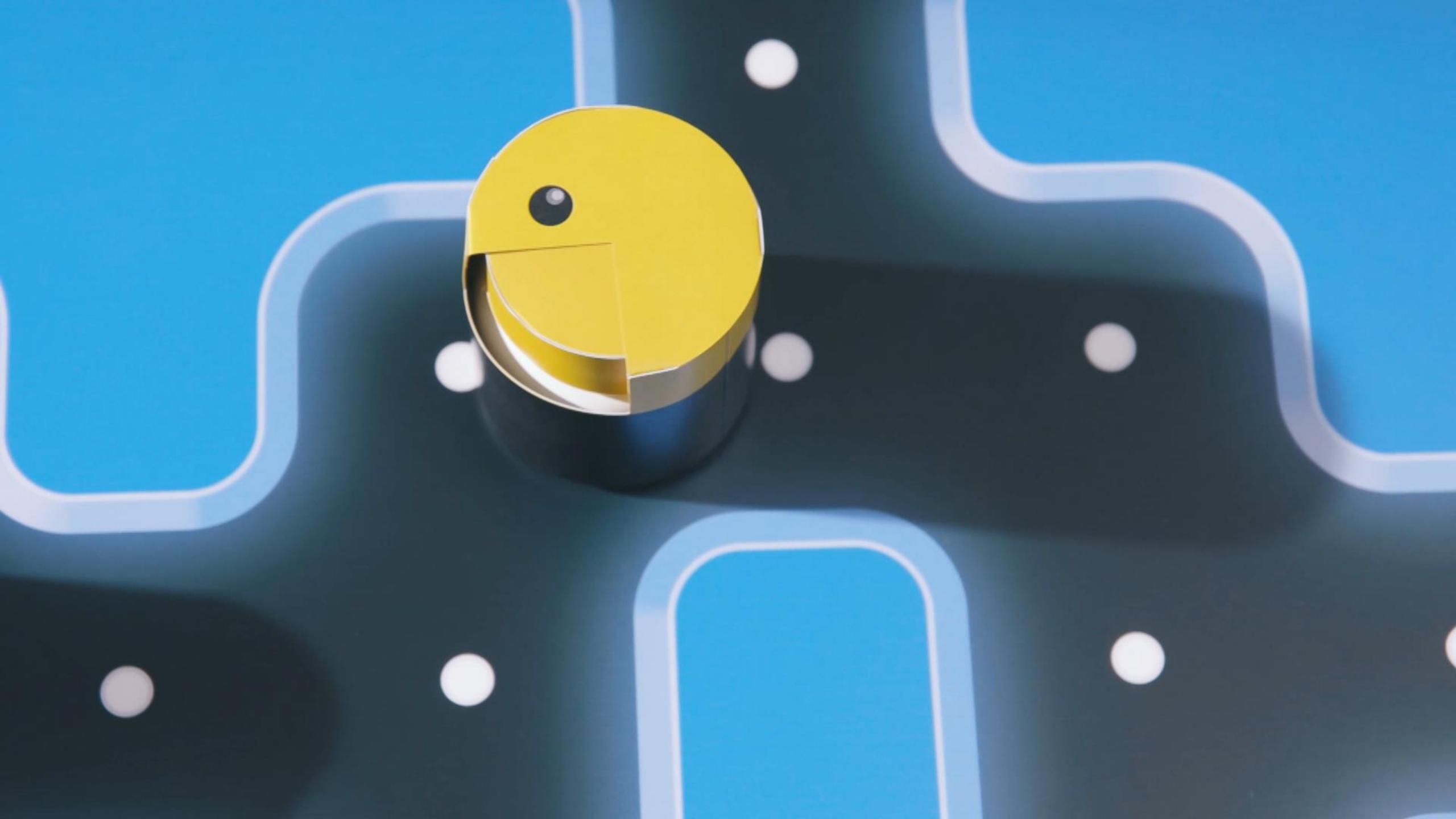


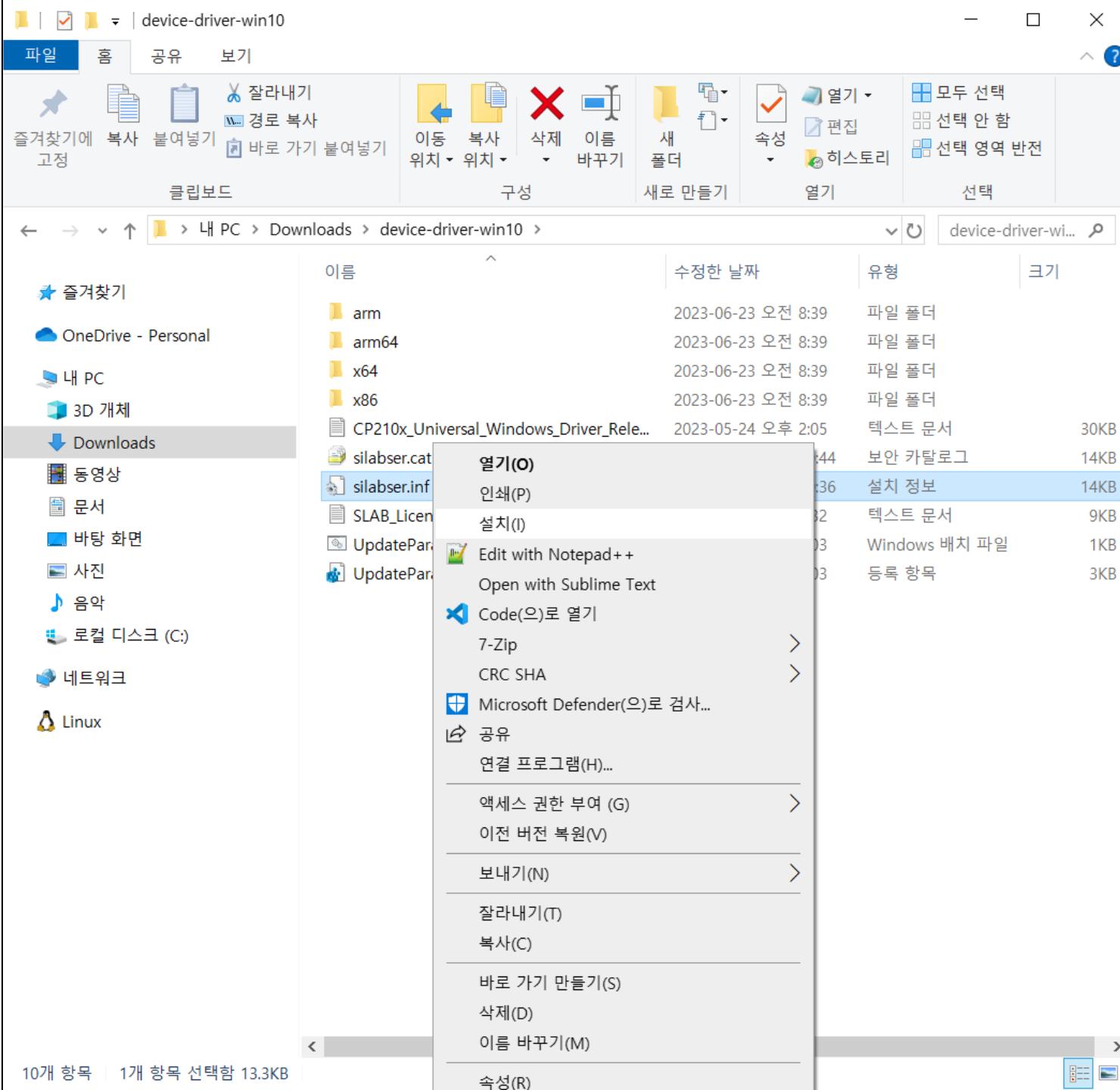
# kamibotpi

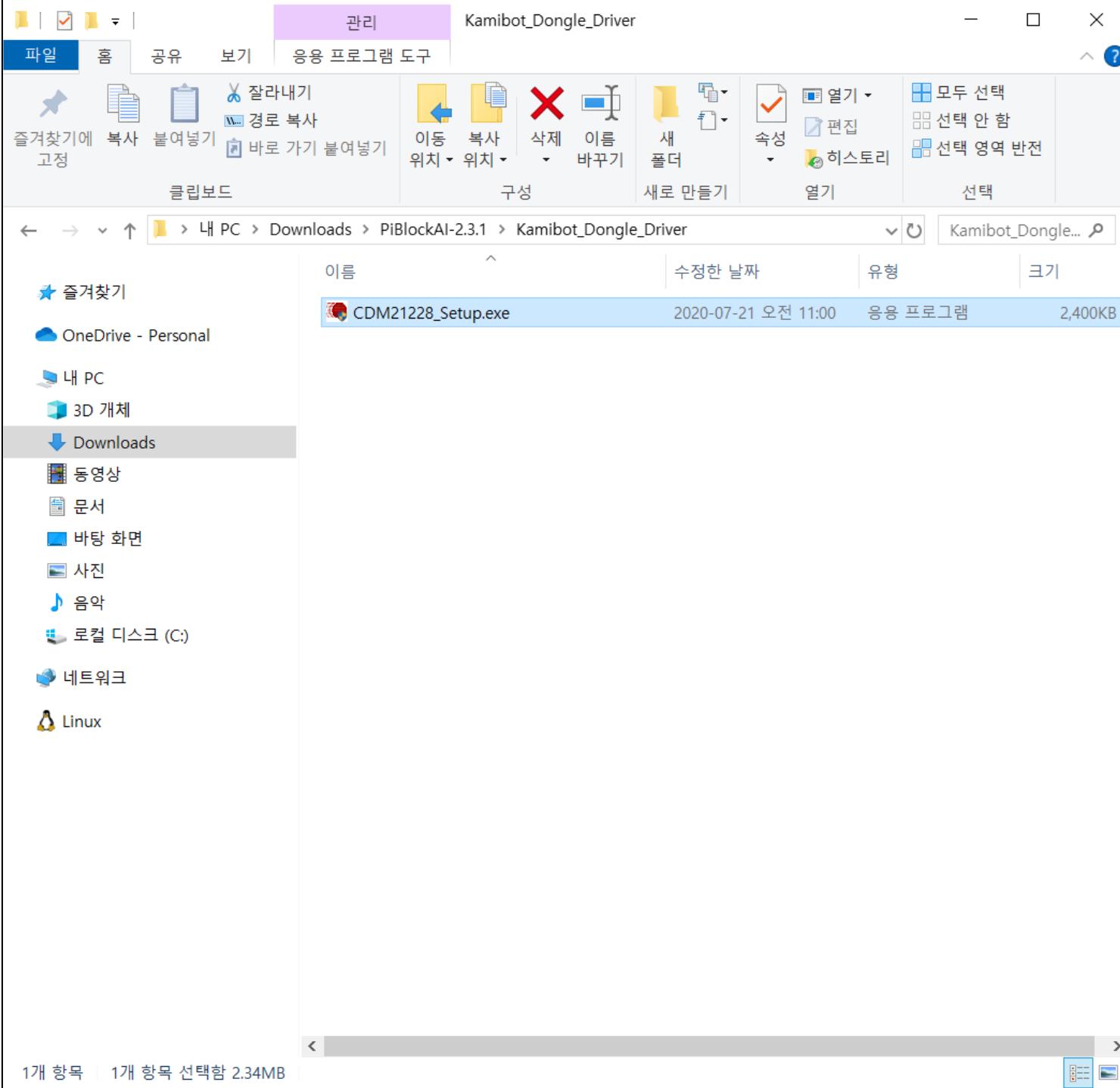
The Smart Coding Robot





# Insall Driver

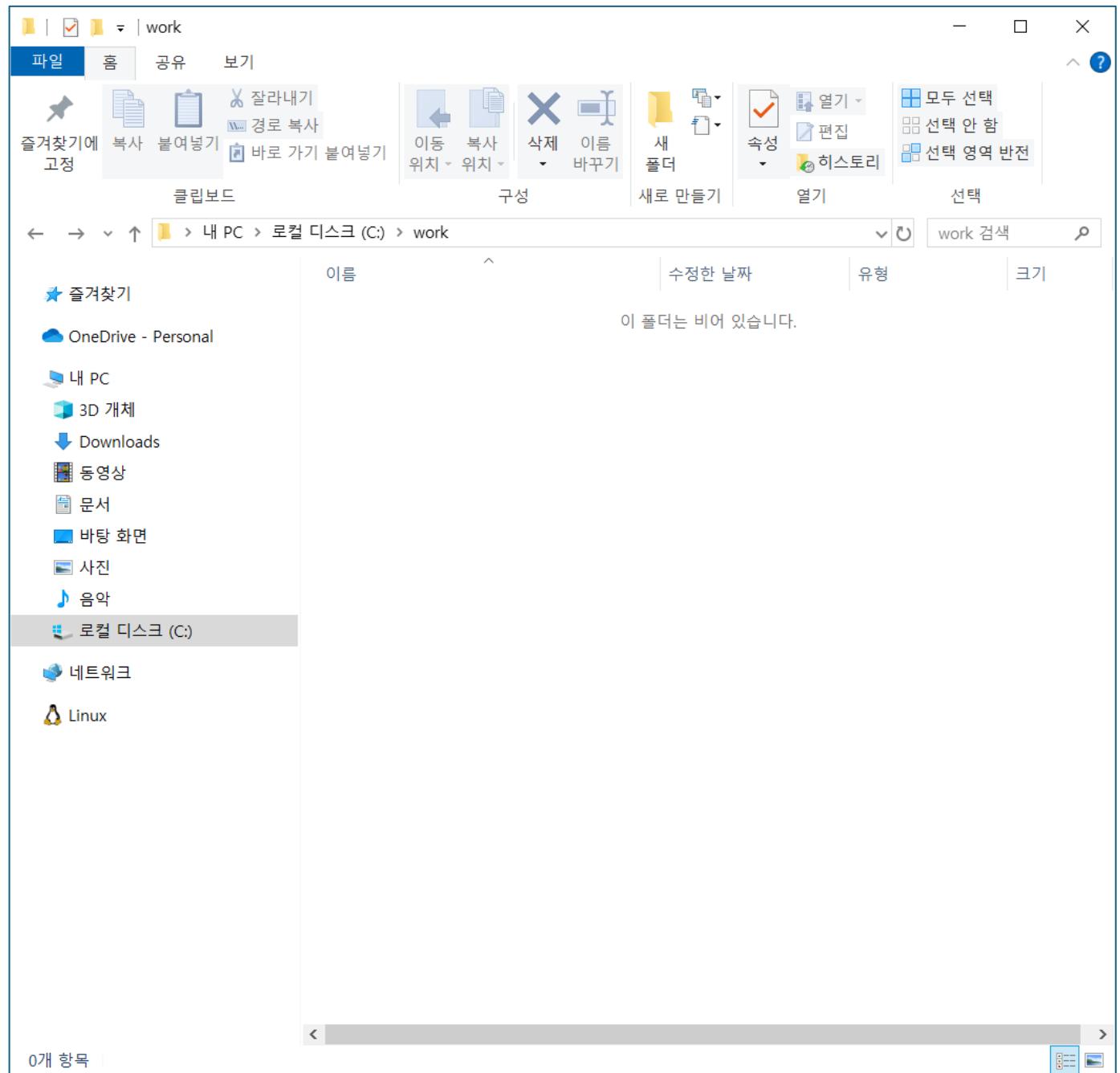




# Virtual Environment

Make Directory

C:/work



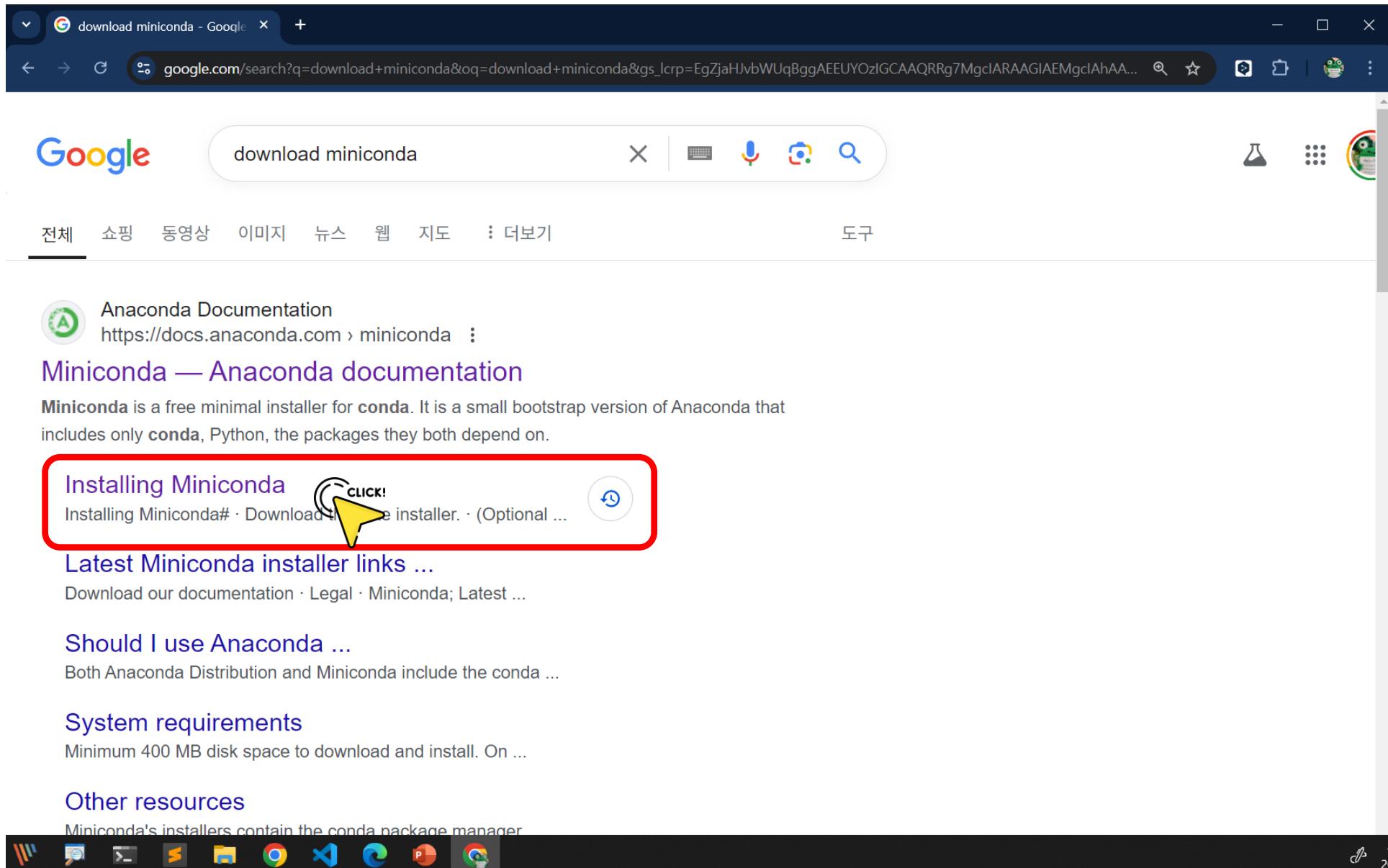
# Install Anaconda or Miniconda

# Miniconda

Miniconda is a free minimal installer for conda. It is a small bootstrap version of Anaconda that includes only conda, Python, the packages they both depend on, and a small number of other useful packages (like pip, zlib, and a few others).

If you need more packages, use the `conda install` command to install from thousands of packages available by default in Anaconda's public repo, or from other channels, like conda-forge or bioconda.

# Search Miniconda



download miniconda - Google

google.com/search?q=download+miniconda&oq=download+miniconda&gs\_lcrp=EgZjaHJvbWUqBggAEUYOzIGCAAQRRg7MgclARAAGIAEMgclAhAA...

Google

download miniconda

X | ⌨ | 🎤 | 📸 | 🔎

전체 쇼핑 동영상 이미지 뉴스 웹 지도 :: 더보기 도구

Anaconda Documentation  
<https://docs.anaconda.com> › miniconda ::

**Miniconda — Anaconda documentation**

Miniconda is a free minimal installer for conda. It is a small bootstrap version of Anaconda that includes only conda, Python, the packages they both depend on.

**Installing Miniconda**  

Installing Miniconda# · Download the installer. · (Optional ...)

**Latest Miniconda installer links ...**

Download our documentation · Legal · Miniconda; Latest ...

**Should I use Anaconda ...**

Both Anaconda Distribution and Miniconda include the conda ...

**System requirements**

Minimum 400 MB disk space to download and install. On ...

**Other resources**

Miniconda's installers contain the conda package manager

File Explorer Task View Start Taskbar Icons

Windows graphical installer

macOS graphical installer

Linux installer

1. [Download the .exe installer.](#)

- 
2. (Optional) Verify your installer's SHA-256 checksum. This check proves that the installer you downloaded is the original one.
    - a. Open PowerShell version 4.0 or later and run the following command:

```
# Replace <FILE_NAME> with the path to your installer  
Get-FileHash <FILE_NAME> -Algorithm SHA256
```

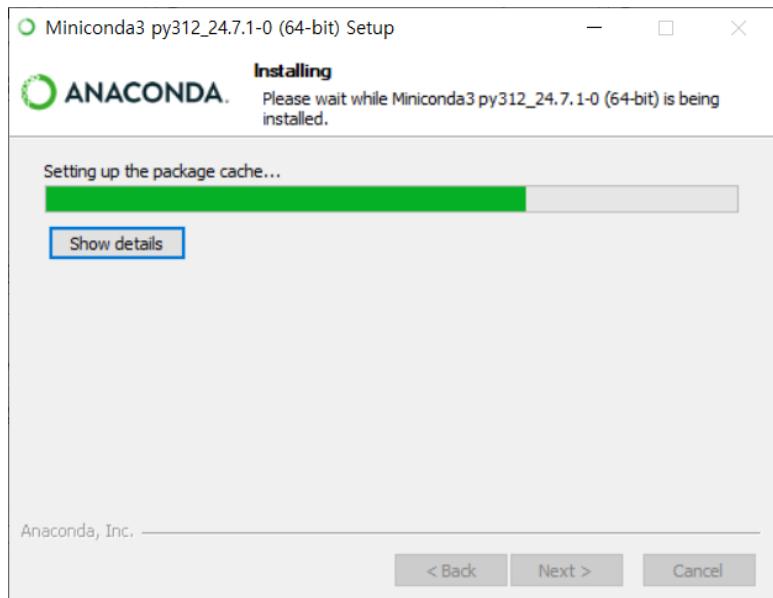
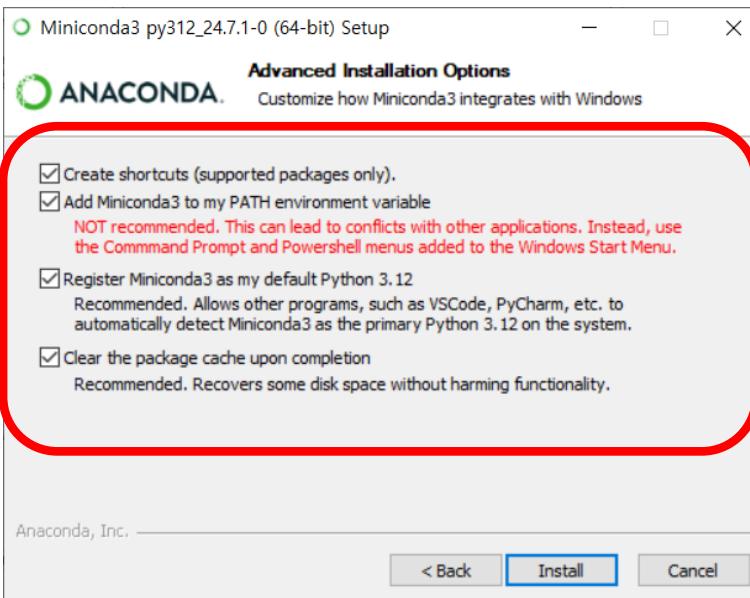
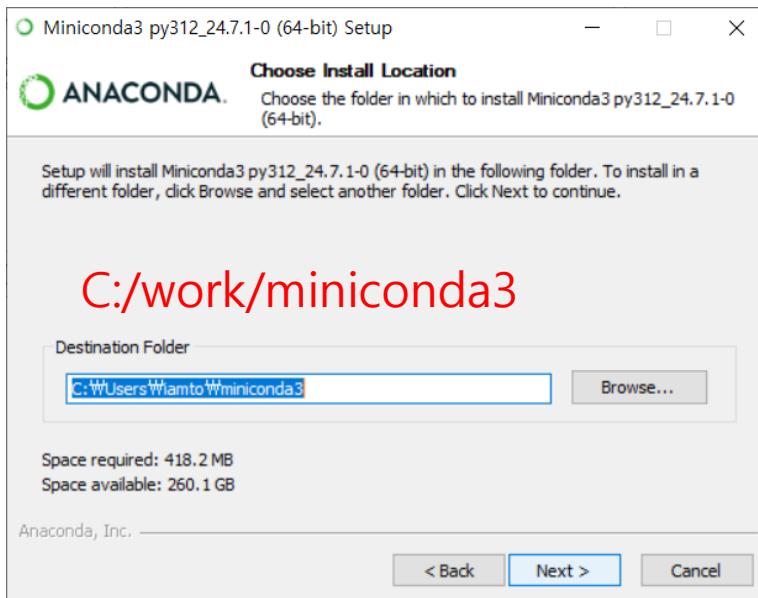
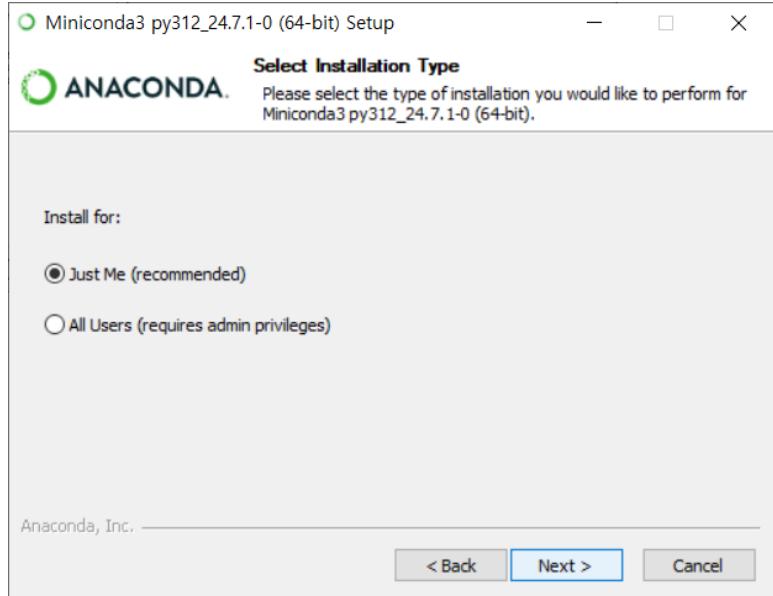
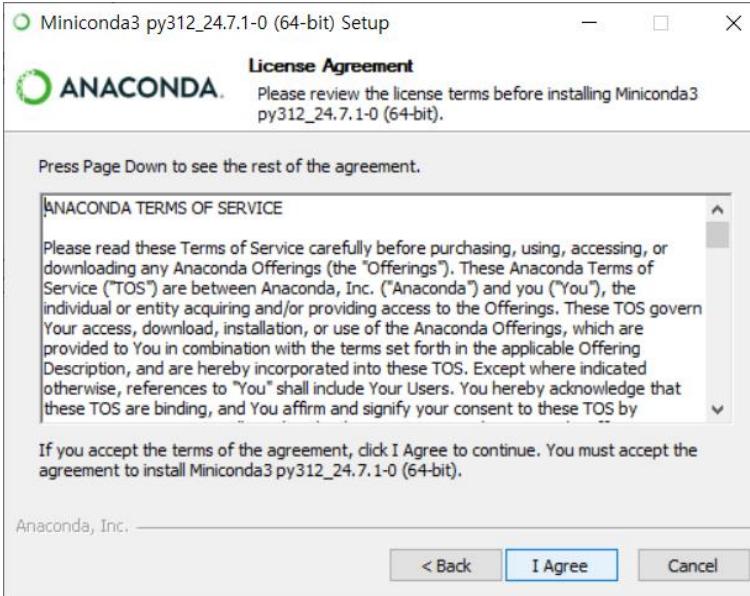
# Latest Miniconda installer links

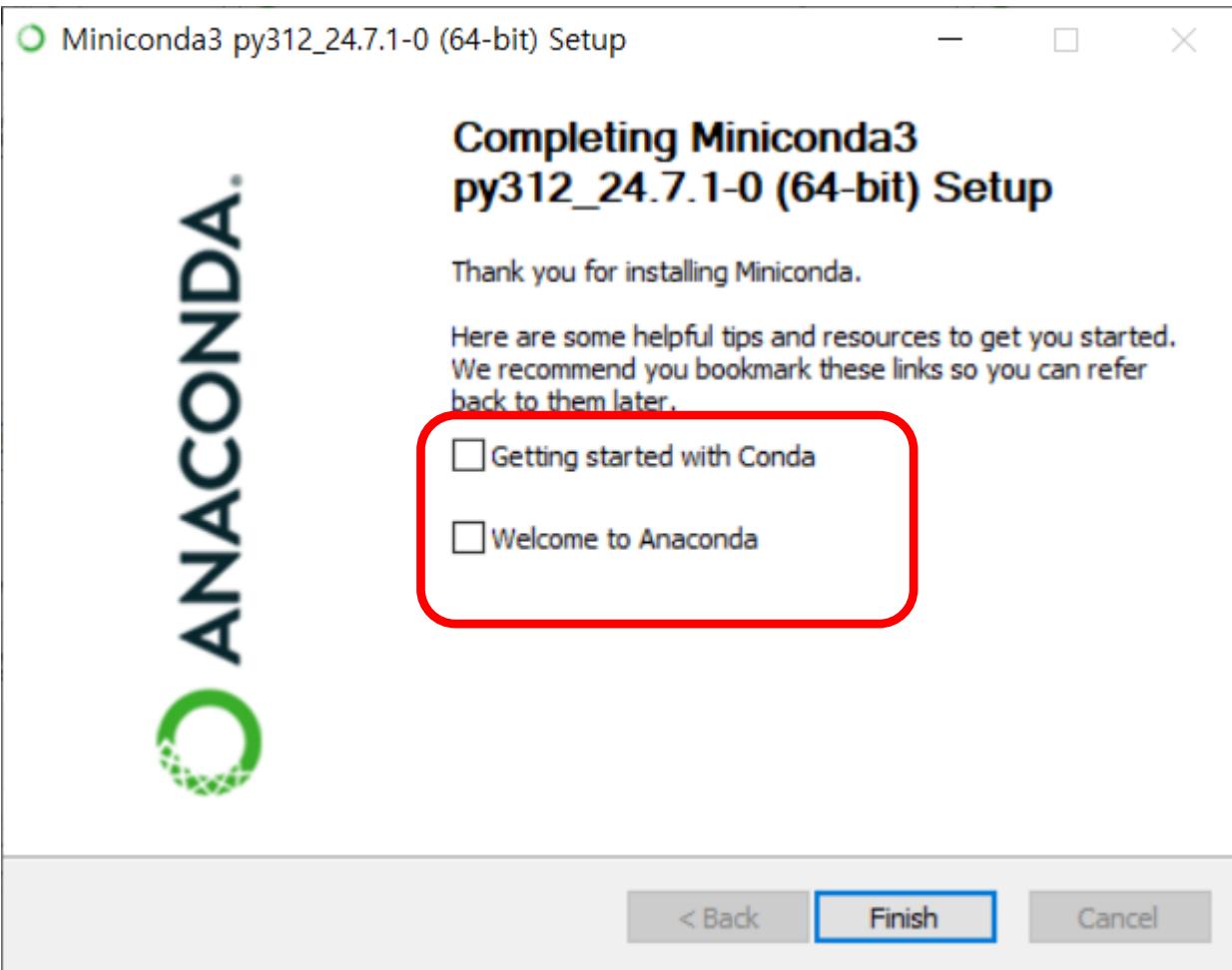
This list of installers is for the latest release of Python: 3.12.4. For installers for older versions of Python, see [Other installer links](#). For an archive of Miniconda versions, see <https://repo.anaconda.com/miniconda/>.

Latest - Conda 24.7.1 Python 3.12.4 released Aug 22, 2024

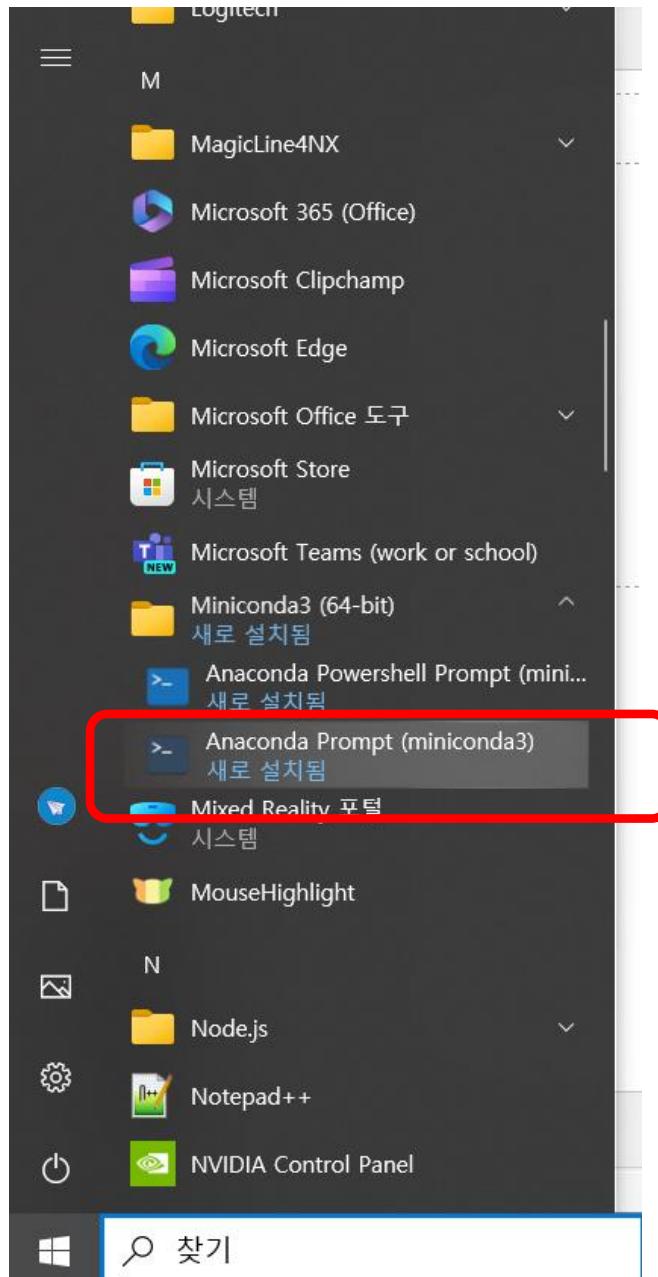
Platform	Name	SHA256 hash
Windows	<a href="#">Miniconda3</a> <a href="#">Windows</a> <a href="#">64-bit</a>	ff8ab50f0303c7b9097387967ac2a721016d020069187eff4e172fc14930ebb7
macOS	<a href="#">Miniconda3</a> <a href="#">macOS</a> <a href="#">Intel x86</a> <a href="#">64-bit</a> <a href="#">bash</a>	5cfb85d81d94dfe3ef3265f2247aef32a35aeb450ea71c3a204cefed384fb87d

# Double-click the .exe file.





# Create Virtual Environment for robot



## Anaconda Prompt(miniconda3)

(base) C:\Users\William>

```
(base) C:\Users\Wiamto>conda create -n robot python==3.9
```

ca-certificates  
5532\_0

openssl

pip

python

setuptools

\_0

sqlite

tzdata

vc

vs2015\_runtime

bb1dd\_1

wheel

pkgs/main/win-64::ca-certificates-2024.9.24-haa9

pkgs/main/win-64::openssl-1.1.1w-h2bbff1b\_0

pkgs/main/win-64::pip-24.2-py39haa95532\_0

pkgs/main/win-64::python-3.9.0-h6244533\_2

pkgs/main/win-64::setuptools-75.1.0-py39haa95532

pkgs/main/win-64::sqlite-3.45.3-h2bbff1b\_0

pkgs/main/noarch::tzdata-2024b-h04d1e81\_0

pkgs/main/win-64::vc-14.40-h2eaa2aa\_1

pkgs/main/win-64::vs2015\_runtime-14.40.33807-h98

pkgs/main/win-64::wheel-0.44.0-py39haa95532\_0

Proceed ([y]/n)? ■y

```
(base) C:\Users\Wiamto>conda activate robot
```

(base) C:\Users\Wiamto>conda activate robot

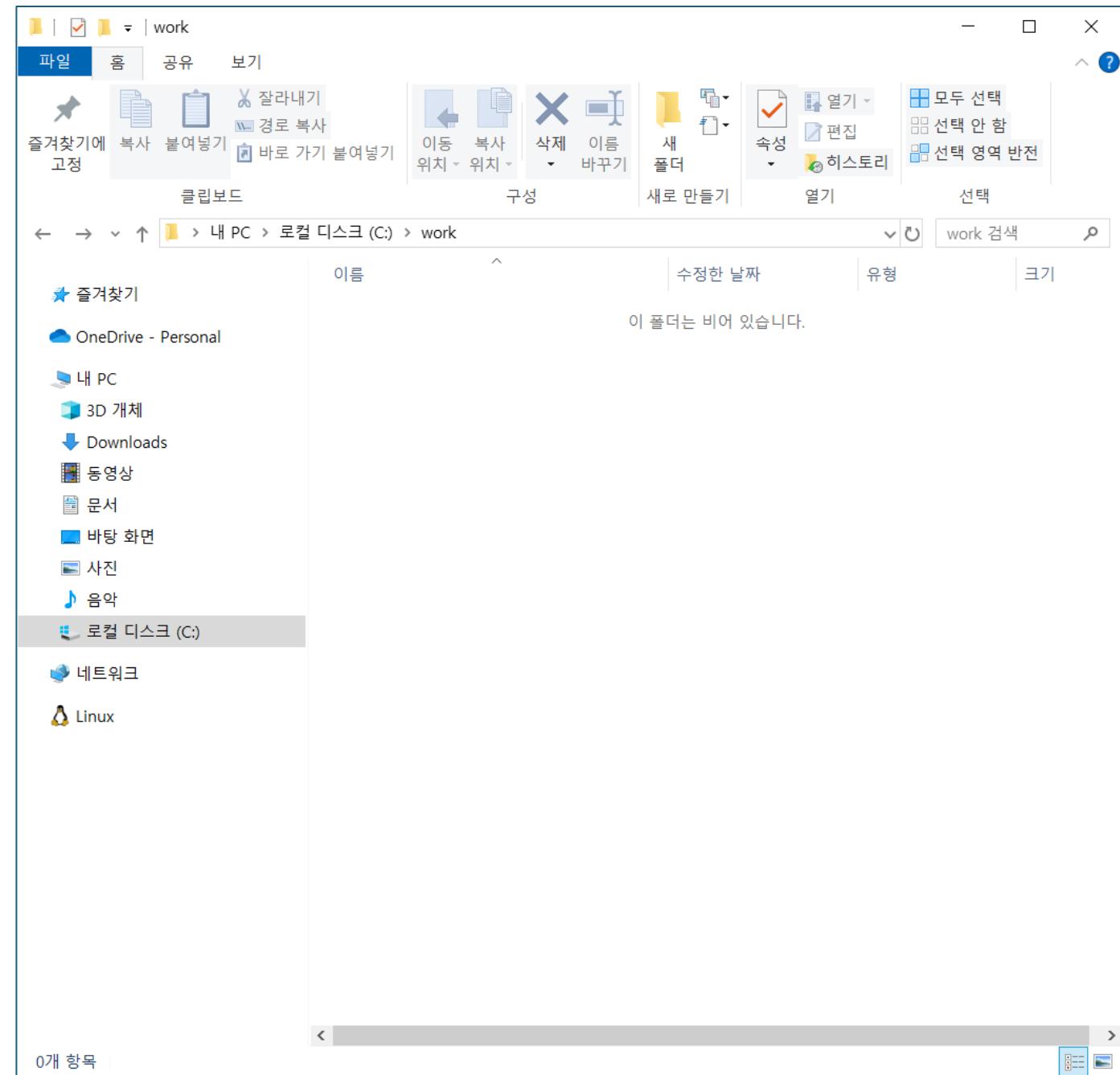
(robot) C:\Users\Wiamto>■

(base) C:\Users\Wiamto>conda activate robot

(robot) C:\Users\Wiamto>■

```
(robot) C:\Users\Wiamto>pip install -U roboid
```

```
(robot) C:\Users\Wiamto>pip install jupyter lab
```



Make Directory

C:/work/robot

devdio/robot x Visual Studio Code - Code Edi x +

← → ⌛ code.visualstudio.com

Visual Studio Code Docs Updates Blog API Extensions FAQ GitHub Copilot

Download

# Code faster with AI

Visual Studio Code with GitHub Copilot supercharges your code with AI-powered suggestions, right in your editor.

[Download for Windows](#) [Try GitHub Copilot](#)

By using VS Code, you agree to its [license](#) and [privacy statement](#).

The screenshot shows the Visual Studio Code interface with the GitHub Copilot feature integrated. The Explorer sidebar shows a project structure with files like .github, .next, .vscode, components, pages, and public. The main editor window displays a file named [slug].tsx with some TypeScript code. In the bottom right corner of the editor, there is a tooltip or suggestion box from GitHub Copilot. The message in the box reads: "I want to make each project a link and add a page for each one". Below this, it says "Workspace" and "Used 2 references". It lists "1. First, let's update projects.tsx" and shows a snippet of code with a cursor in the middle. The status bar at the bottom of the screen shows various icons and the number "26".

File Edit Selection View ... ← → Search

EXTENSIONS: MARKETPLACE

python

**Python** Python language support with extension access point... Microsoft **Install**

**Python Debugger** Python Debugger extension using debugpy. Microsoft **Install**

**Python Indent** Correct Python indentation Kevin Rose **Install**

**Python for VSCode** Python language extension for vscode Thomas Haakon Townsend **Install** **!**

**Python Extension Pack** Popular Visual Studio Code extensions for Python Don Jayamanne **Install**

**Python Environment Manager** View and manage Python environments & packages. Don Jayamanne **Install**

**Extension: Python** v2024.16.1 Microsoft microsoft.com | 140,931,418 Python language support with extension access...

**Install**  Auto Update

DETAILS FEATURES CHANGELOG EXTENSION PACK

# Python extension for Visual Studio Code

A Visual Studio Code extension with rich support for the Python language (for all actively supported Python versions), providing access points for extensions to seamlessly integrate and offer support for IntelliSense (Pylance), debugging (Python Debugger), formatting, linting, code

Categories

- Programming Languages
- Debuggers Other
- Data Science
- Machine Learning

Resources

Marketplace Issues

0 0 0 0 0 Go Live



File Edit Selection View ...

← →

Search

□ □ □ □ - ×



EXPLORER

...

▼ NO FOLDER OPENED

You have not yet opened a folder.

Open Folder

You can clone a repository locally.

Clone Repository

To learn more about how to use Git and source control in VS Code [read our docs](#).



> OUTLINE

> TIMELINE

⊗ 0 △ 0 ⚙ 0

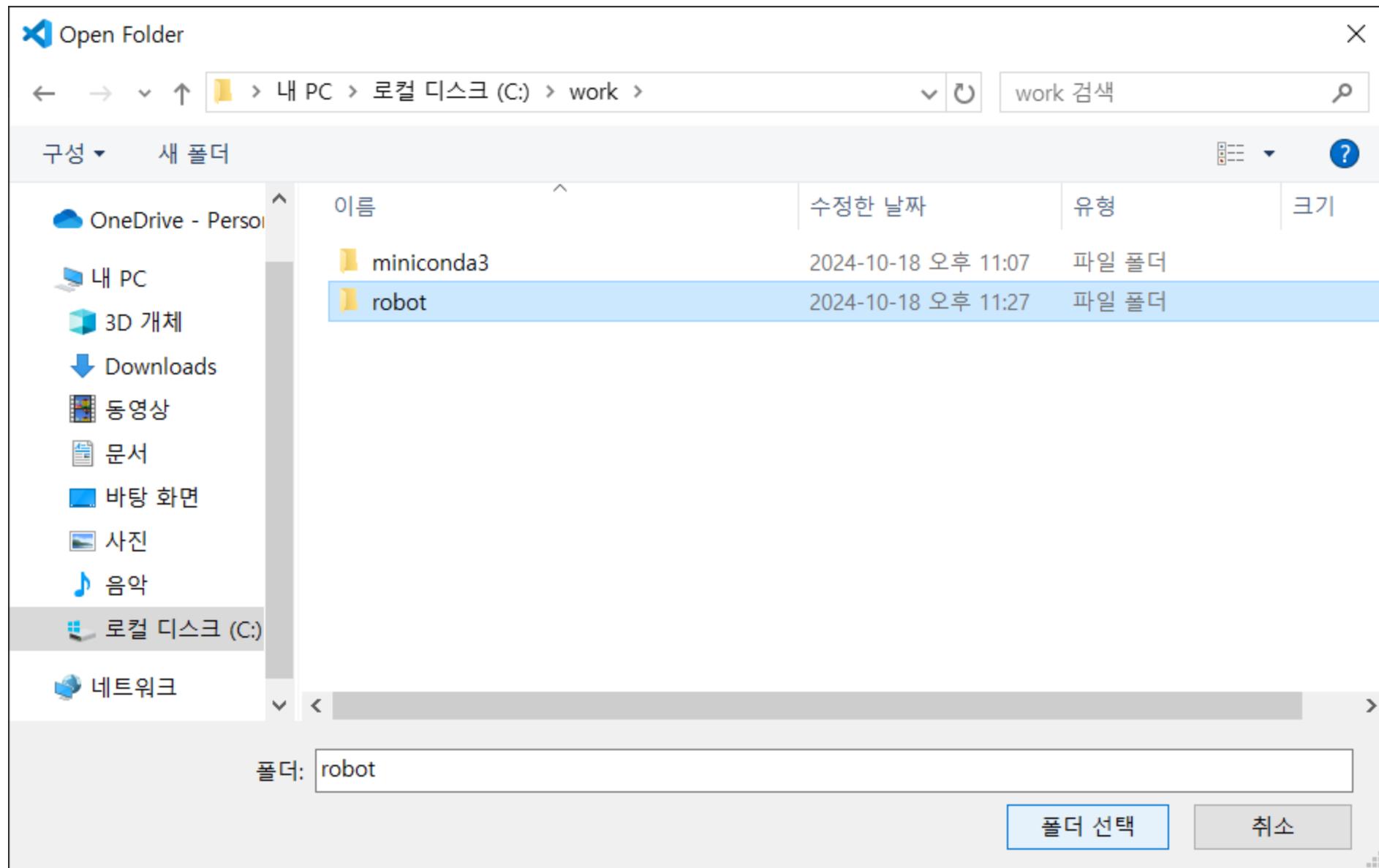
🔍 Go Live 🔔

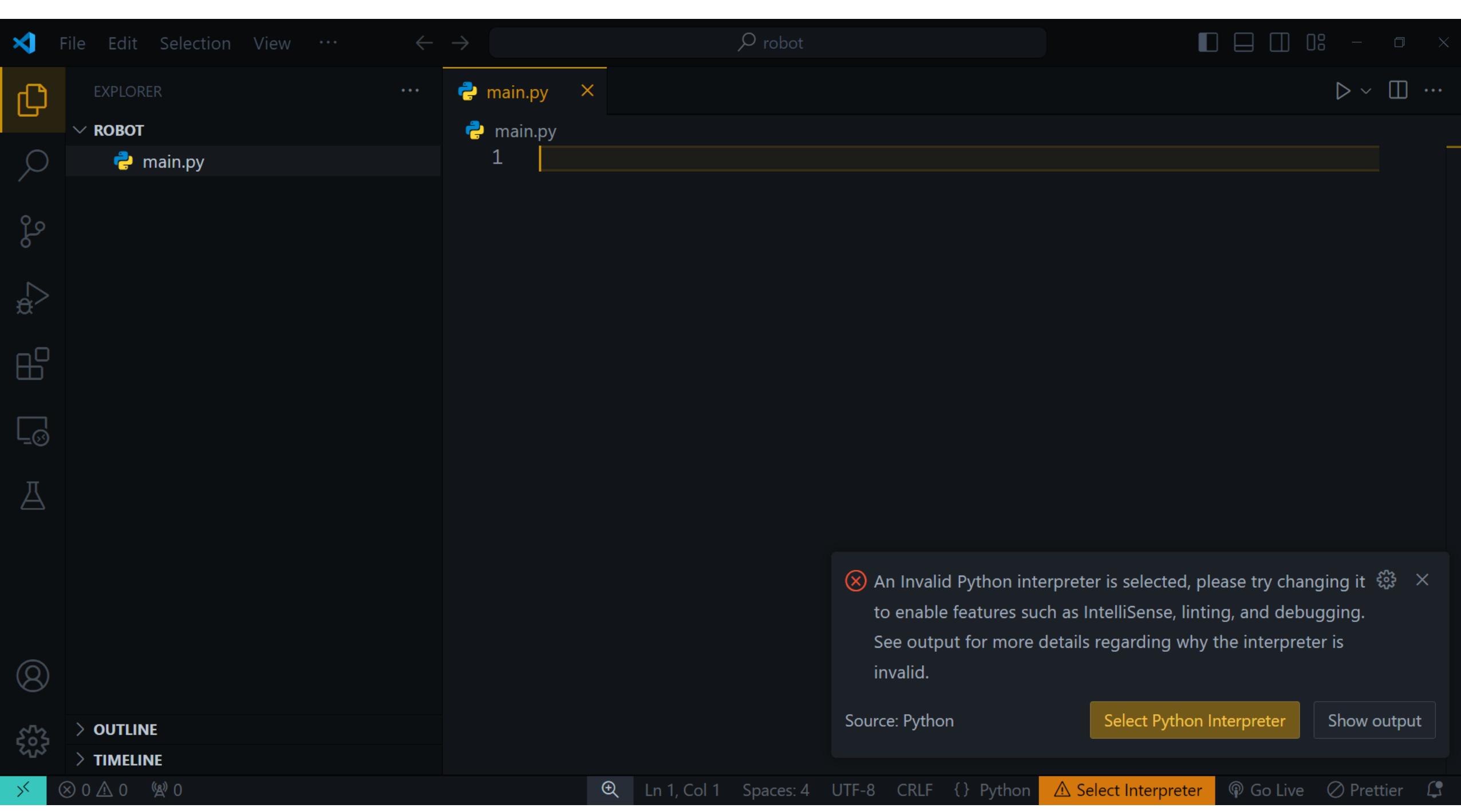
Show All Commands `Ctrl + Shift + P`

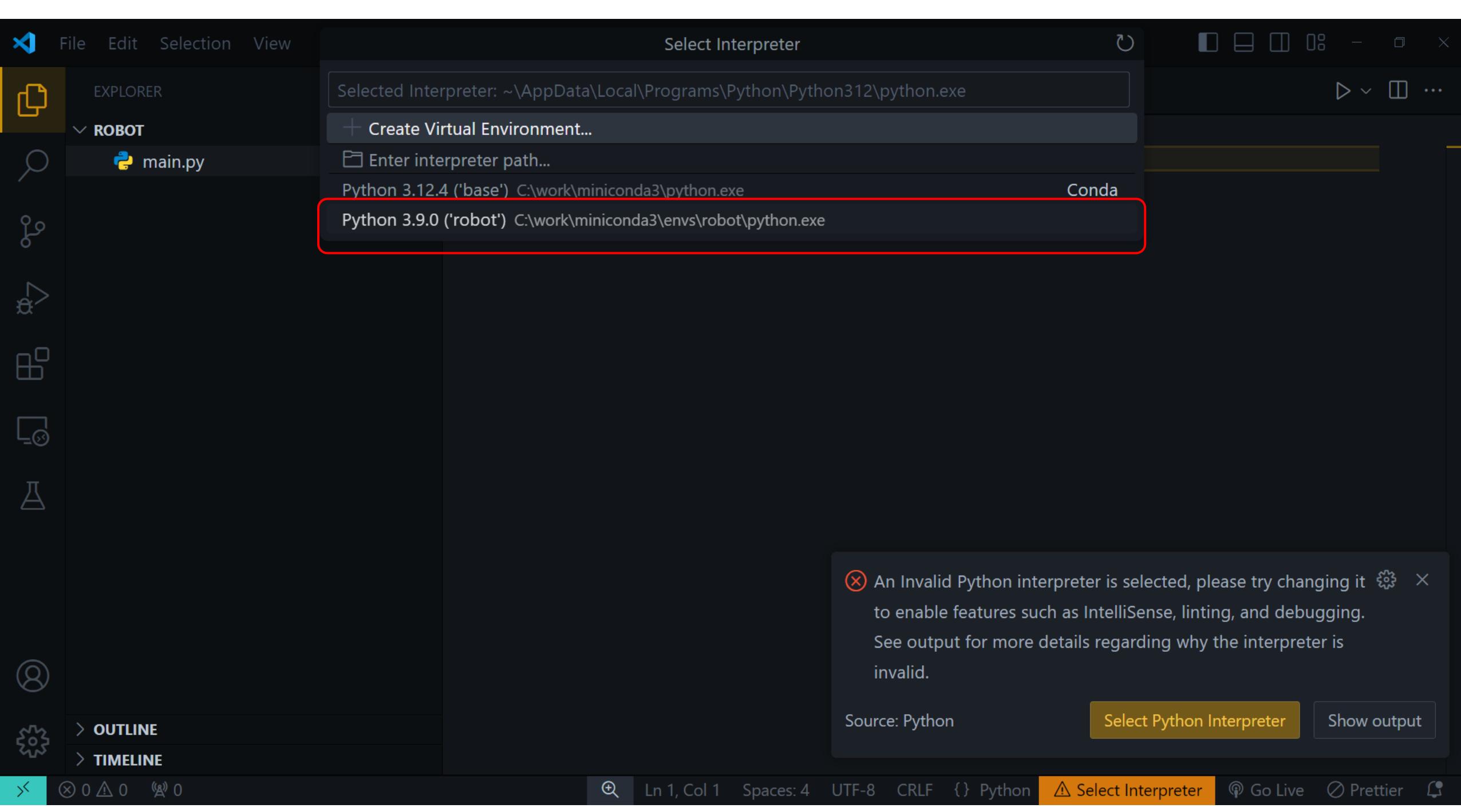
Open File `Ctrl + O`

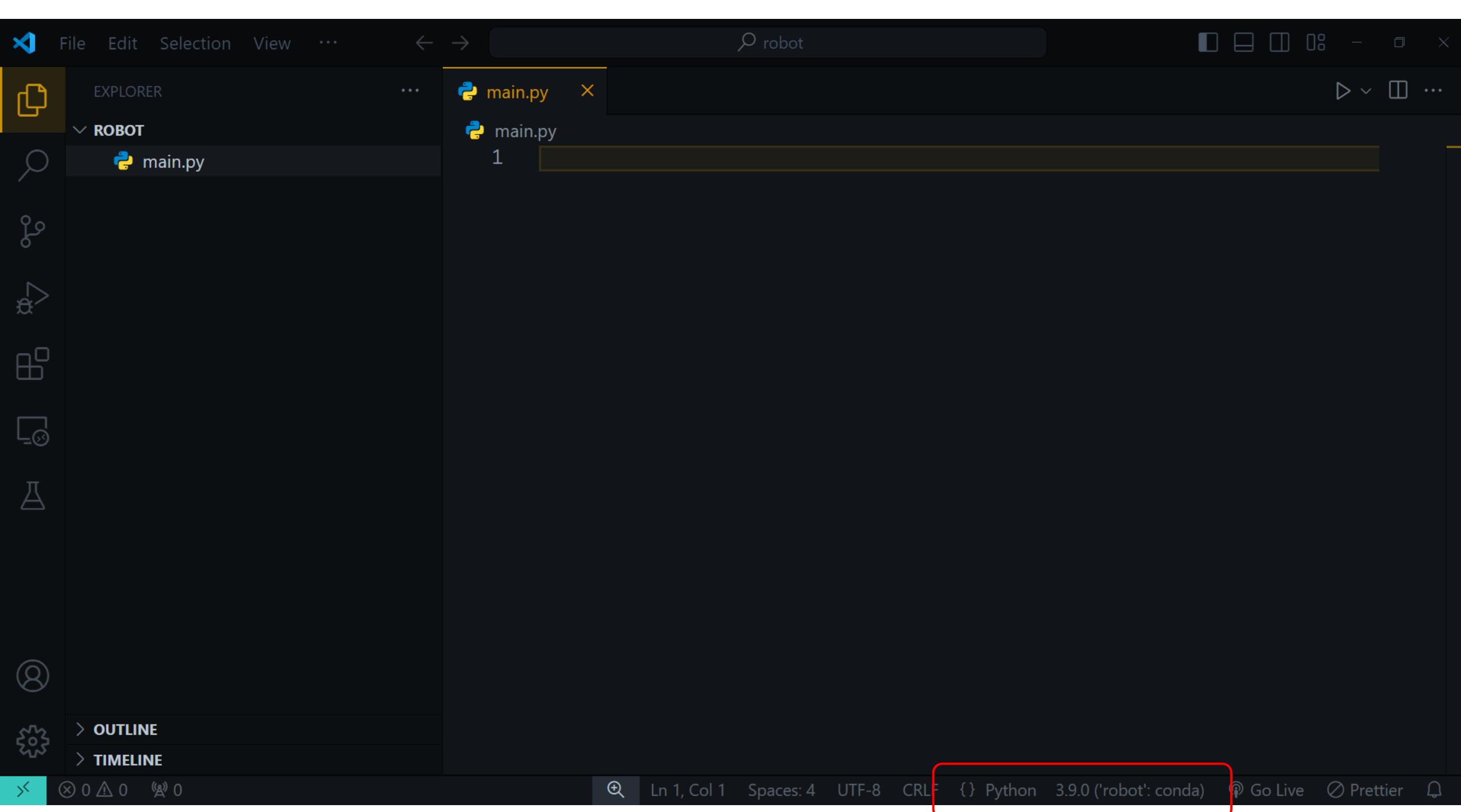
Open Folder `Ctrl + K` `Ctrl + O`

Open Recent `Ctrl + R`









A screenshot of the Visual Studio Code (VS Code) interface. The top bar shows the title 'robot' and standard window controls. The left sidebar has icons for Explorer, Search, Problems, and others. The 'ROBOT' folder in the Explorer view contains a file named 'main.py'. The main editor area displays the code:

```
1 print('hello kamibot')
```

The terminal tab is active, showing the output of running the script:

```
(robot) C:\work\robot>C:/work/miniconda3/envs/robot/python.exe c:/work/robot/main.py
hello kamibot

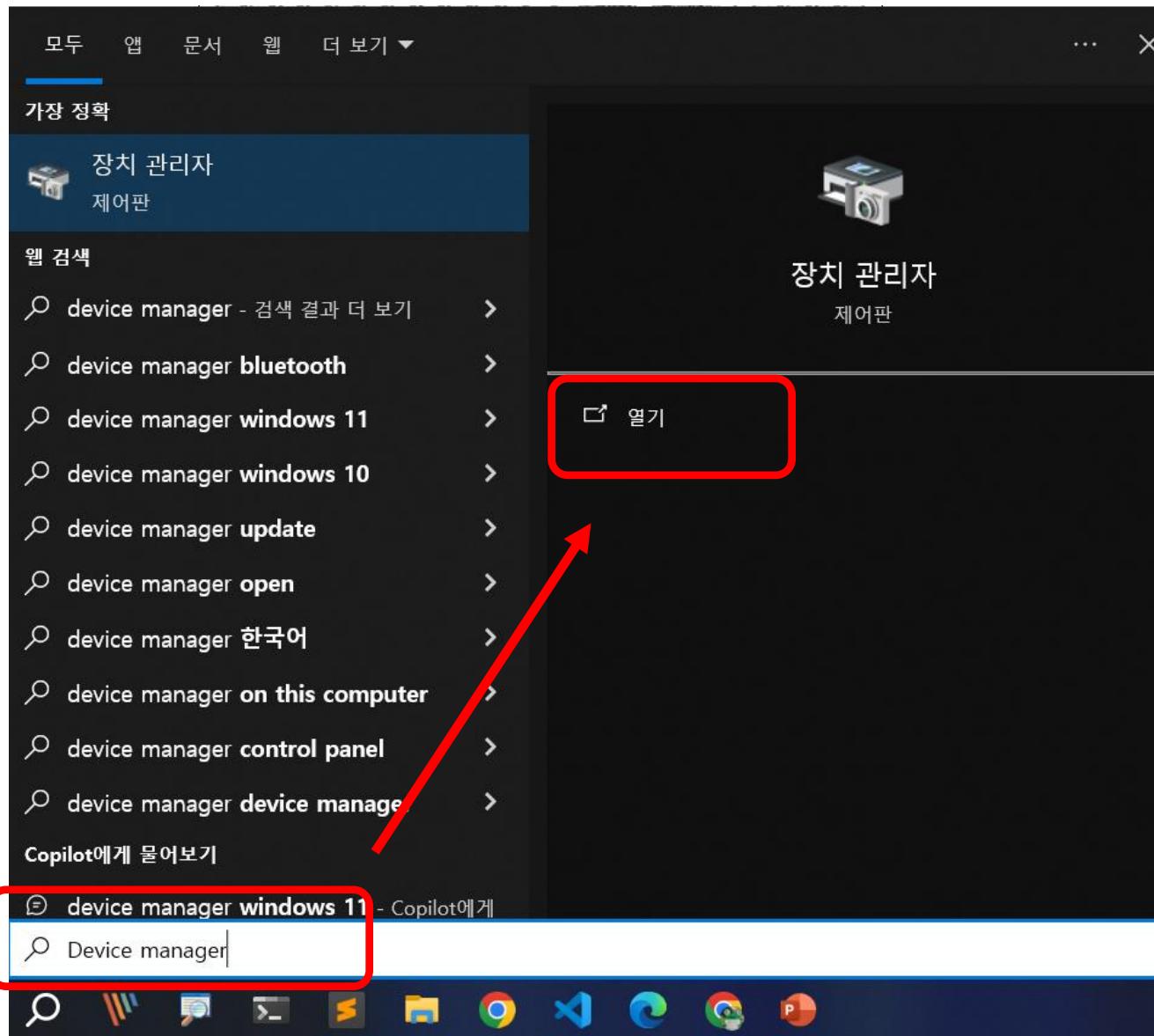
(robot) C:\work\robot>
```

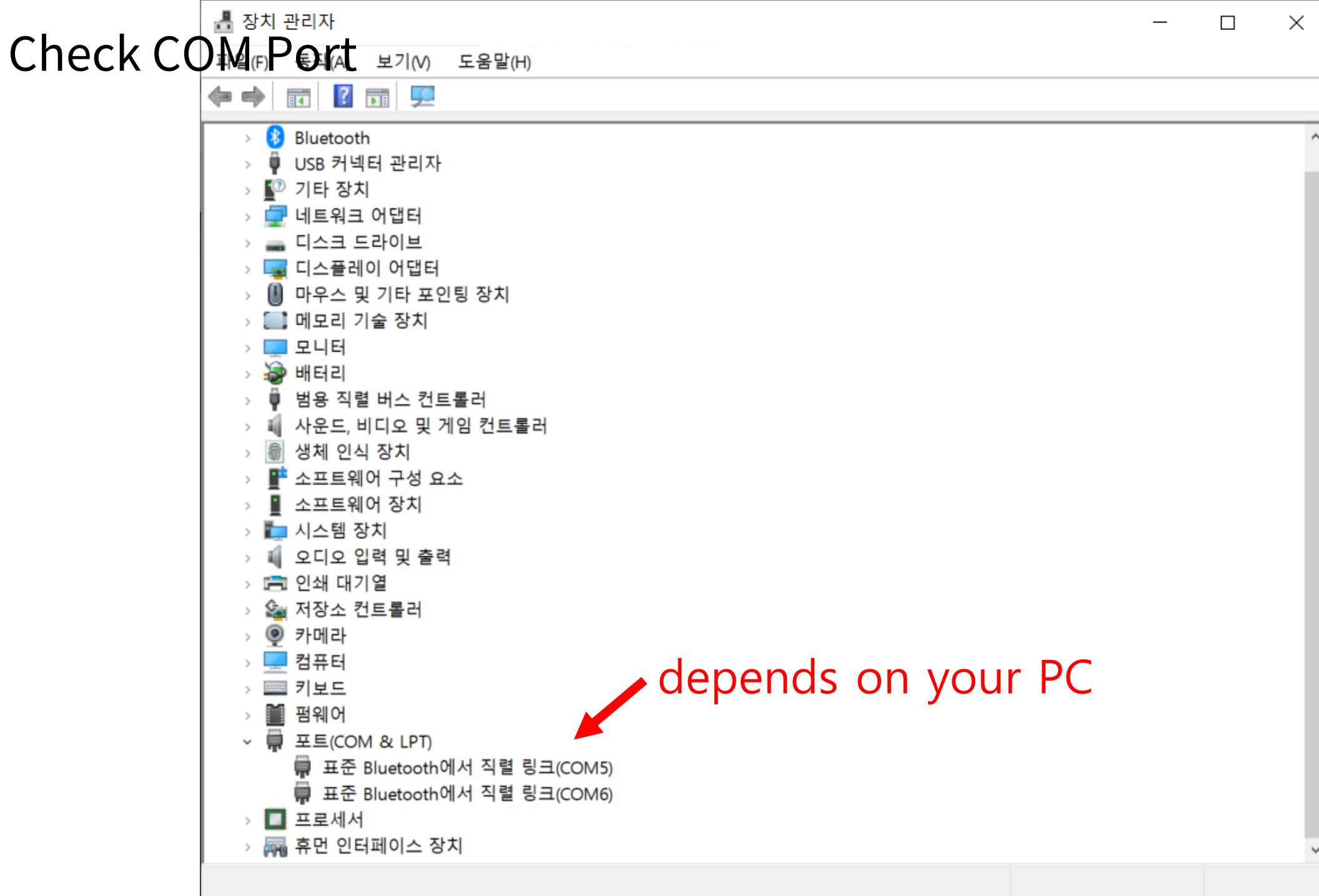
The status bar at the bottom shows file statistics (0 errors, 0 warnings), the current line and column (Ln 1, Col 21), character encoding (UTF-8), and the Python version (3.9.0). A red box highlights the terminal icon in the top right corner.

# KamibotPI

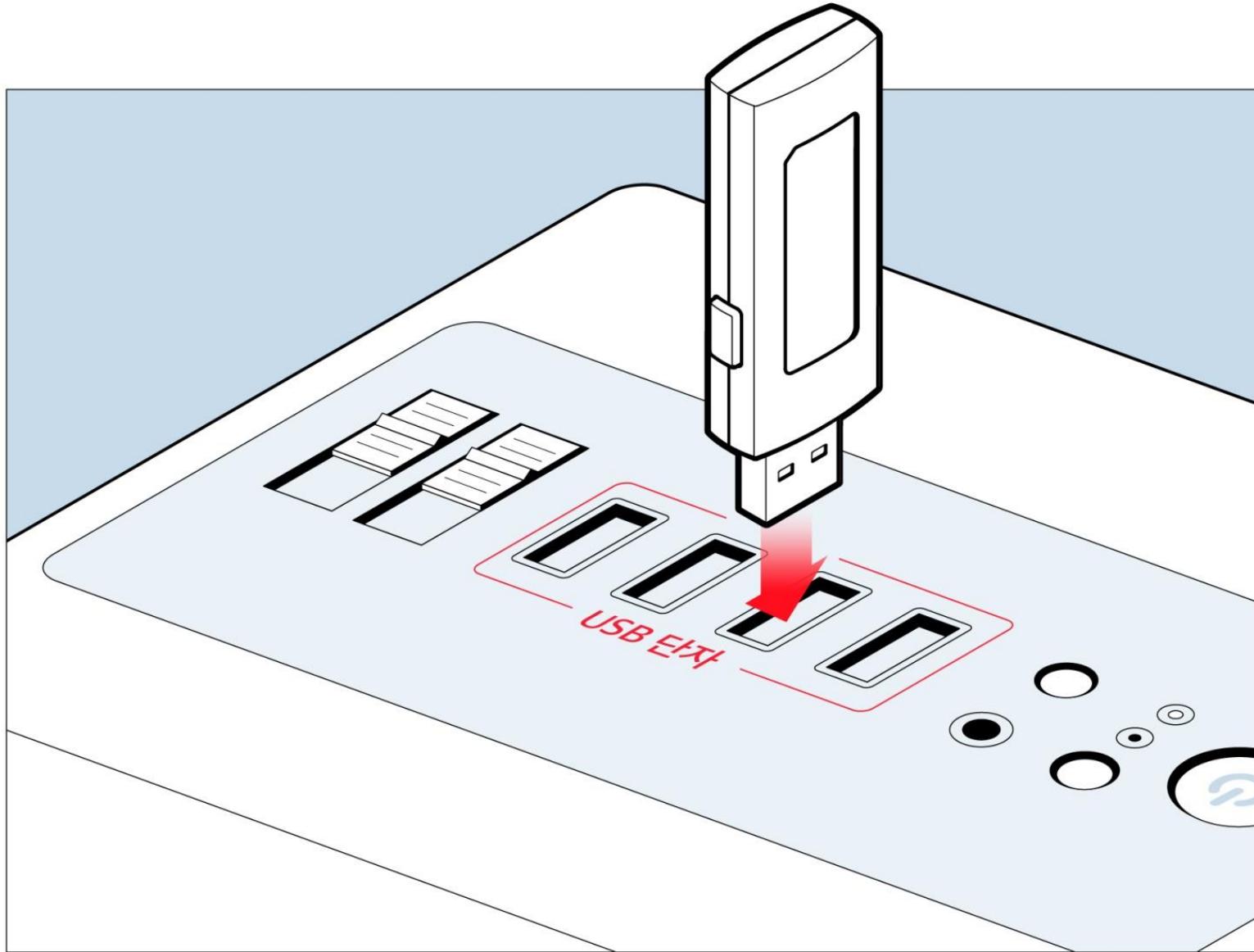
# Connect PC to KamibotPi

# Search Device Manager and Open Device Manager

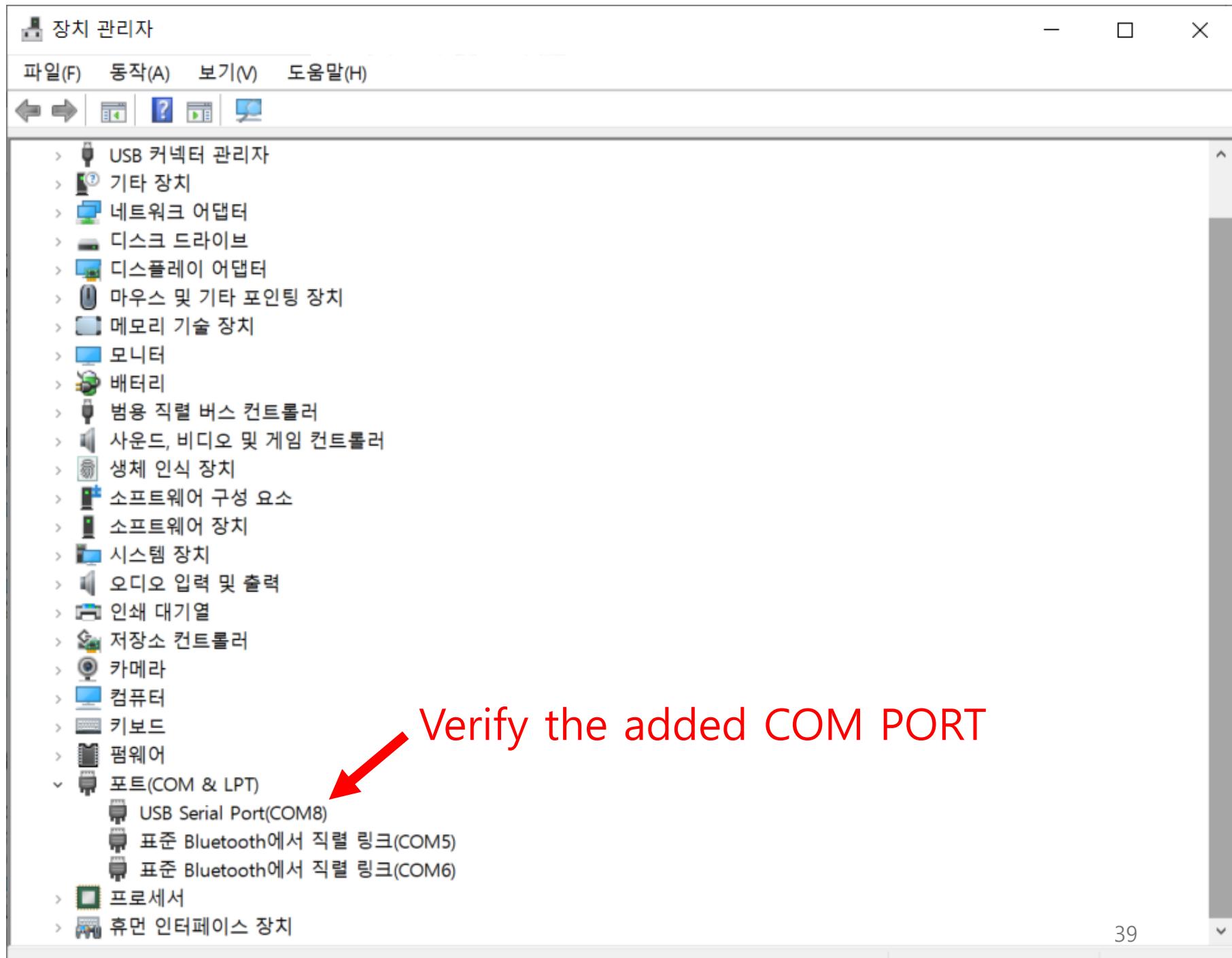




# 1. Plug the dongle for KamibotPI



# Check COM Port



# Robot Connect

# Power ON/OFF

01



02



03



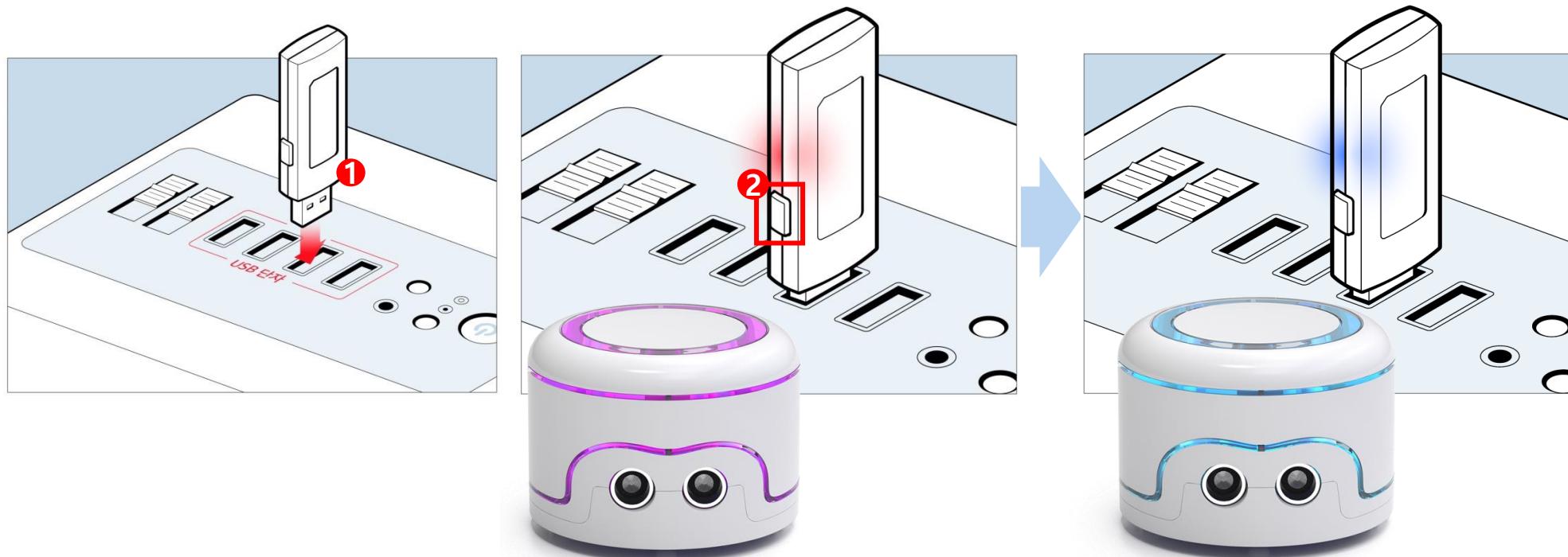
Kamibot Pi's ON/OFF switch is located on its underside.

Turn on Kamibot Pi by flipping the switch up to the ON position.

Turn off Kamibot Pi by flipping the switch down to the OFF position.

## 2. Connecting with KamibotPI

Place Kamibot and Dongle as close together as possible, then press the button on the dongle.



\*\* When connected, the LED changes to blue.

# First Program

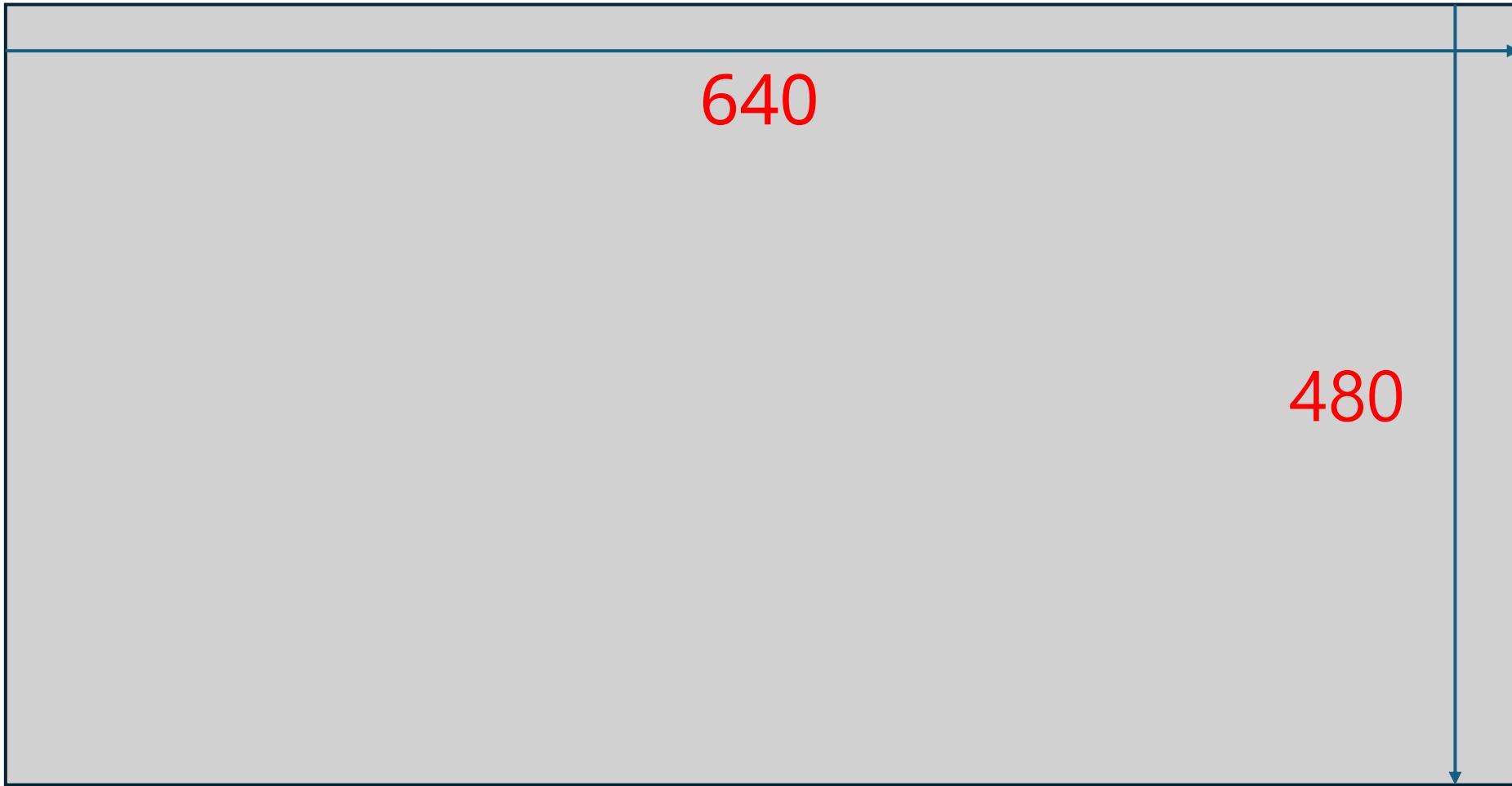
## main.py

Make new file “main.py”

# HelloAI

# Display Camera

(0, 0)



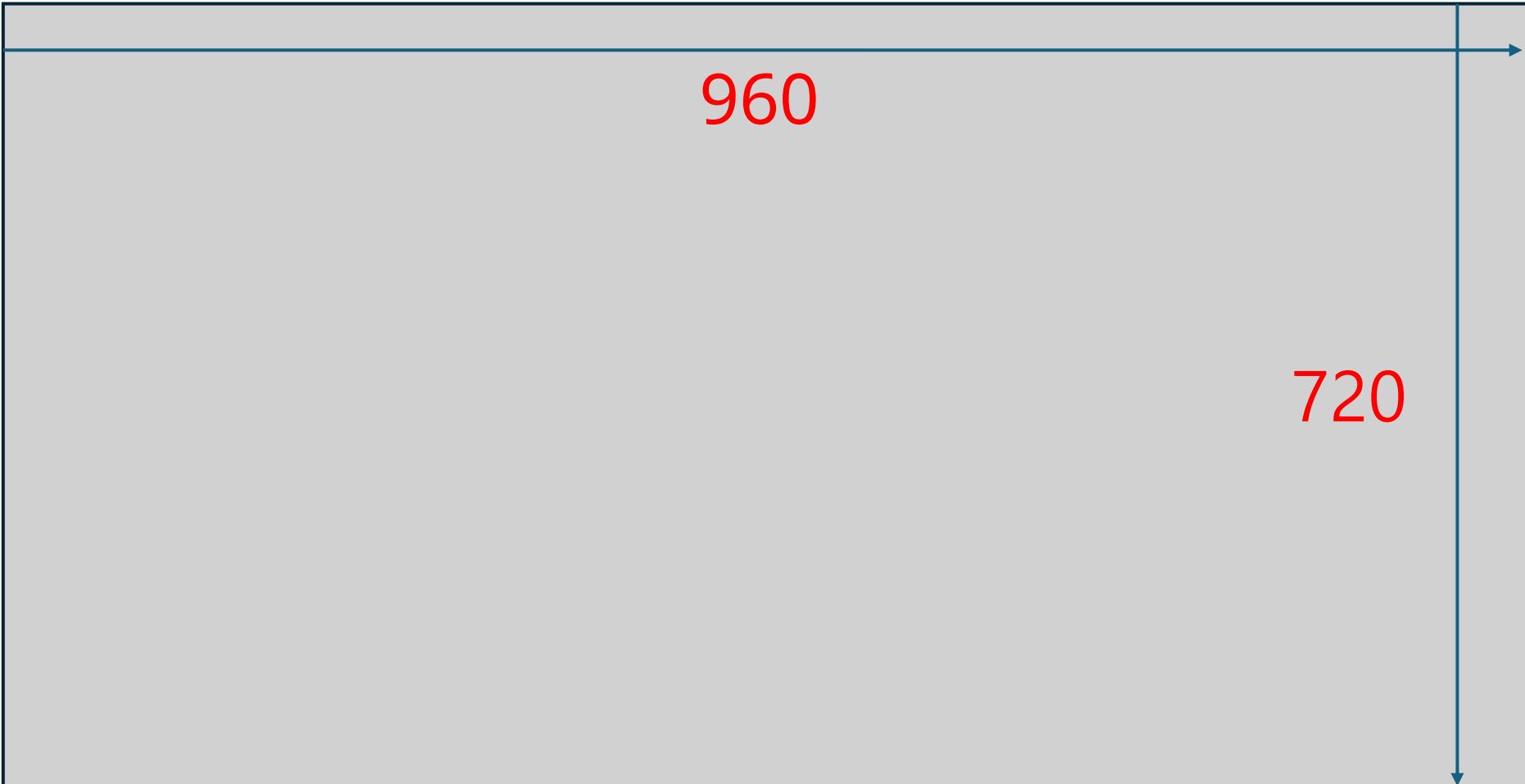
# Display Camera

(0, 0)

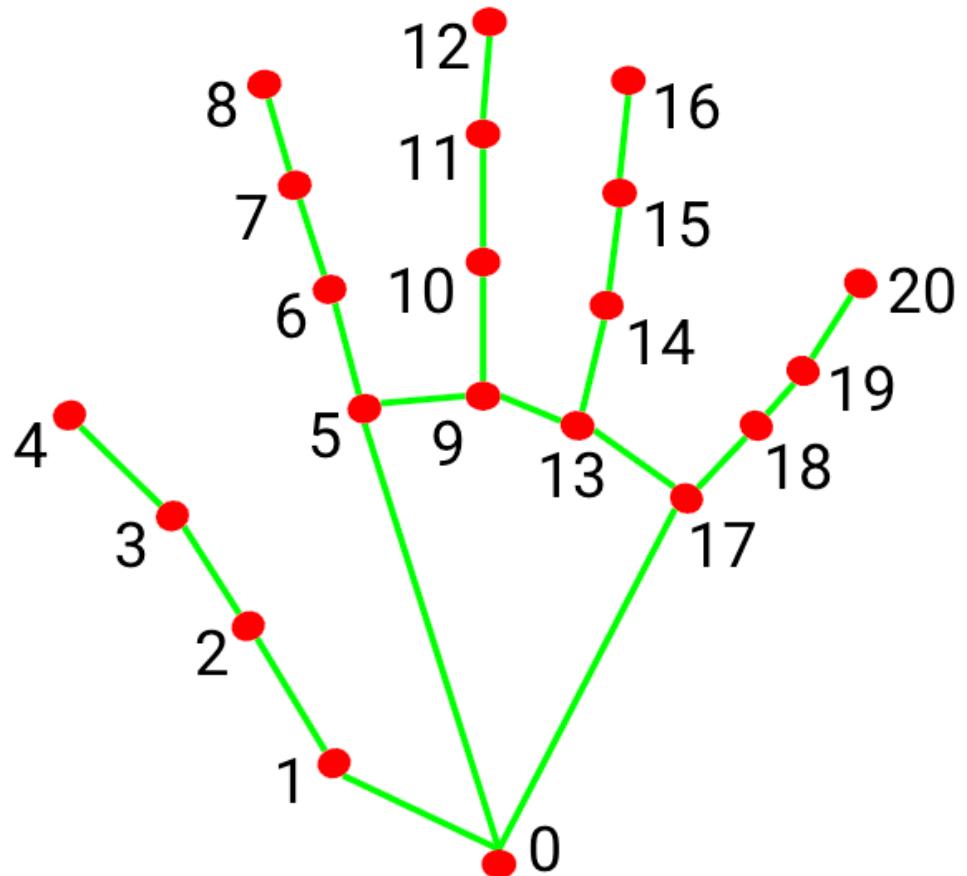
960

720

(960, 720)



# Hand Detector



- 0. WRIST
- 1. THUMB\_CMC
- 2. THUMB\_MCP
- 3. THUMB\_IP
- 4. THUMB\_TIP
- 5. INDEX\_FINGER\_MCP
- 6. INDEX\_FINGER\_PIP
- 7. INDEX\_FINGER\_DIP
- 8. INDEX\_FINGER\_TIP
- 9. MIDDLE\_FINGER\_MCP
- 10. MIDDLE\_FINGER\_PIP
- 11. MIDDLE\_FINGER\_DIP
- 12. MIDDLE\_FINGER\_TIP
- 13. RING\_FINGER\_MCP
- 14. RING\_FINGER\_PIP
- 15. RING\_FINGER\_DIP
- 16. RING\_FINGER\_TIP
- 17. PINKY\_MCP
- 18. PINKY\_PIP
- 19. PINKY\_DIP
- 20. PINKY\_TIP

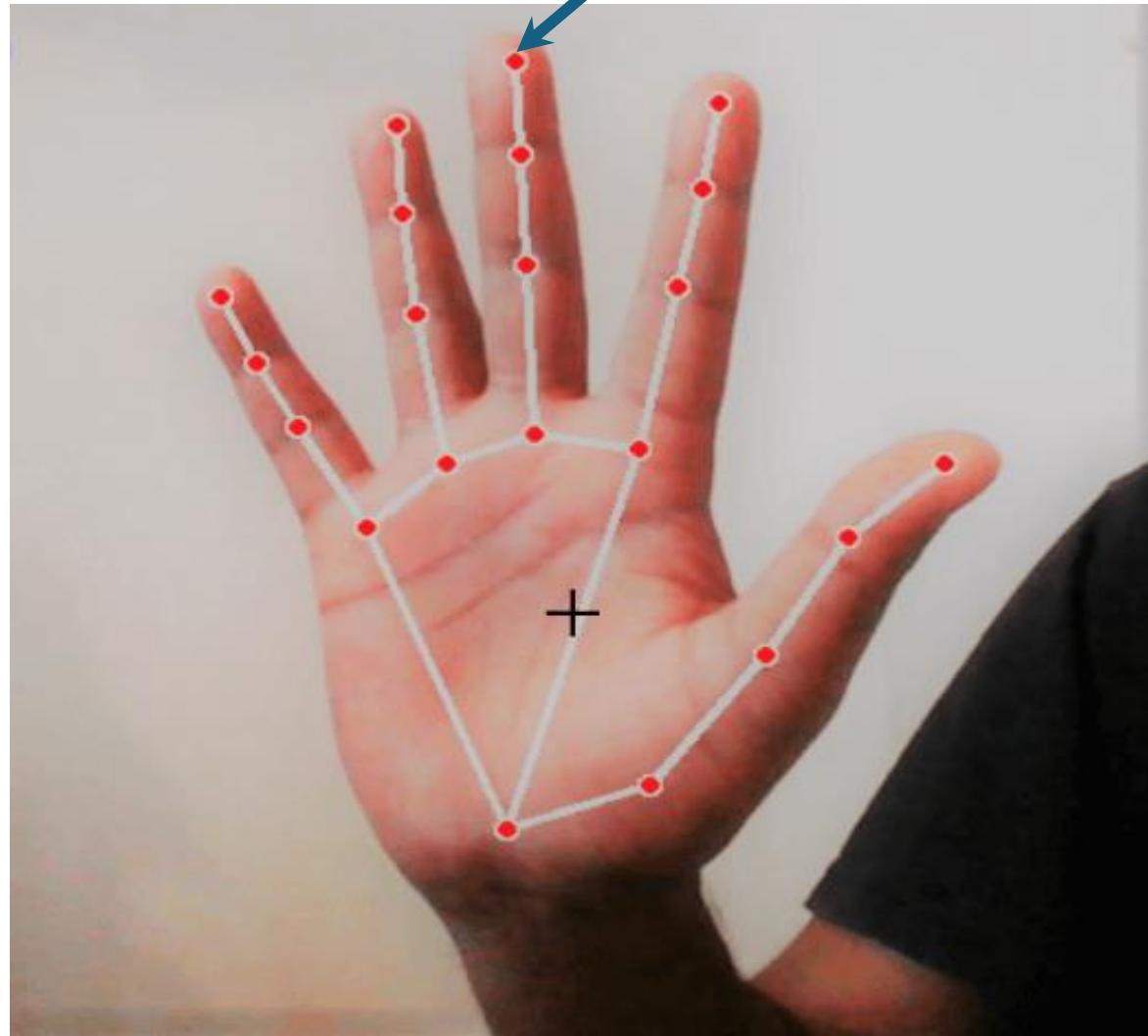
(0, 0)

x

y

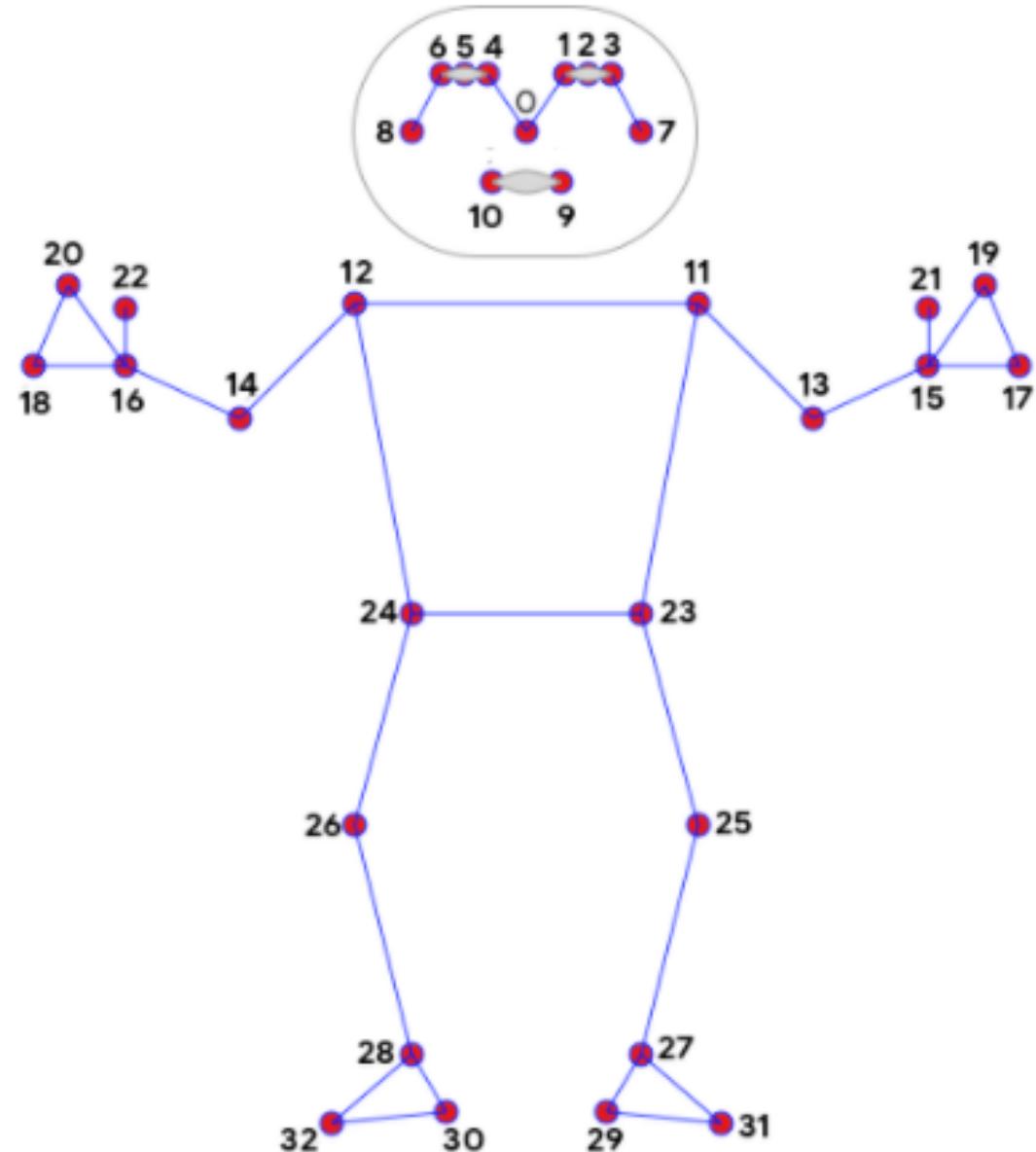
z

[230, 10, -100]



(480, 480)

# Pose Detector



- |                    |                      |
|--------------------|----------------------|
| 0. nose            | 17. left_pinky       |
| 1. left_eye_inner  | 18. right_pinky      |
| 2. left_eye        | 19. left_index       |
| 3. left_eye_outer  | 20. right_index      |
| 4. right_eye_inner | 21. left_thumb       |
| 5. right_eye       | 22. right_thumb      |
| 6. right_eye_outer | 23. left_hip         |
| 7. left_ear        | 24. right_hip        |
| 8. right_ear       | 25. left_knee        |
| 9. mouth_left      | 26. right_knee       |
| 10. mouth_right    | 27. left_ankle       |
| 11. left_shoulder  | 28. right_ankle      |
| 12. right_shoulder | 29. left_heel        |
| 13. left_elbow     | 30. right_heel       |
| 14. right_elbow    | 31. left_foot_index  |
| 15. left_wrist     | 32. right_foot_index |
| 16. right_wrist    |                      |

(0, 0)

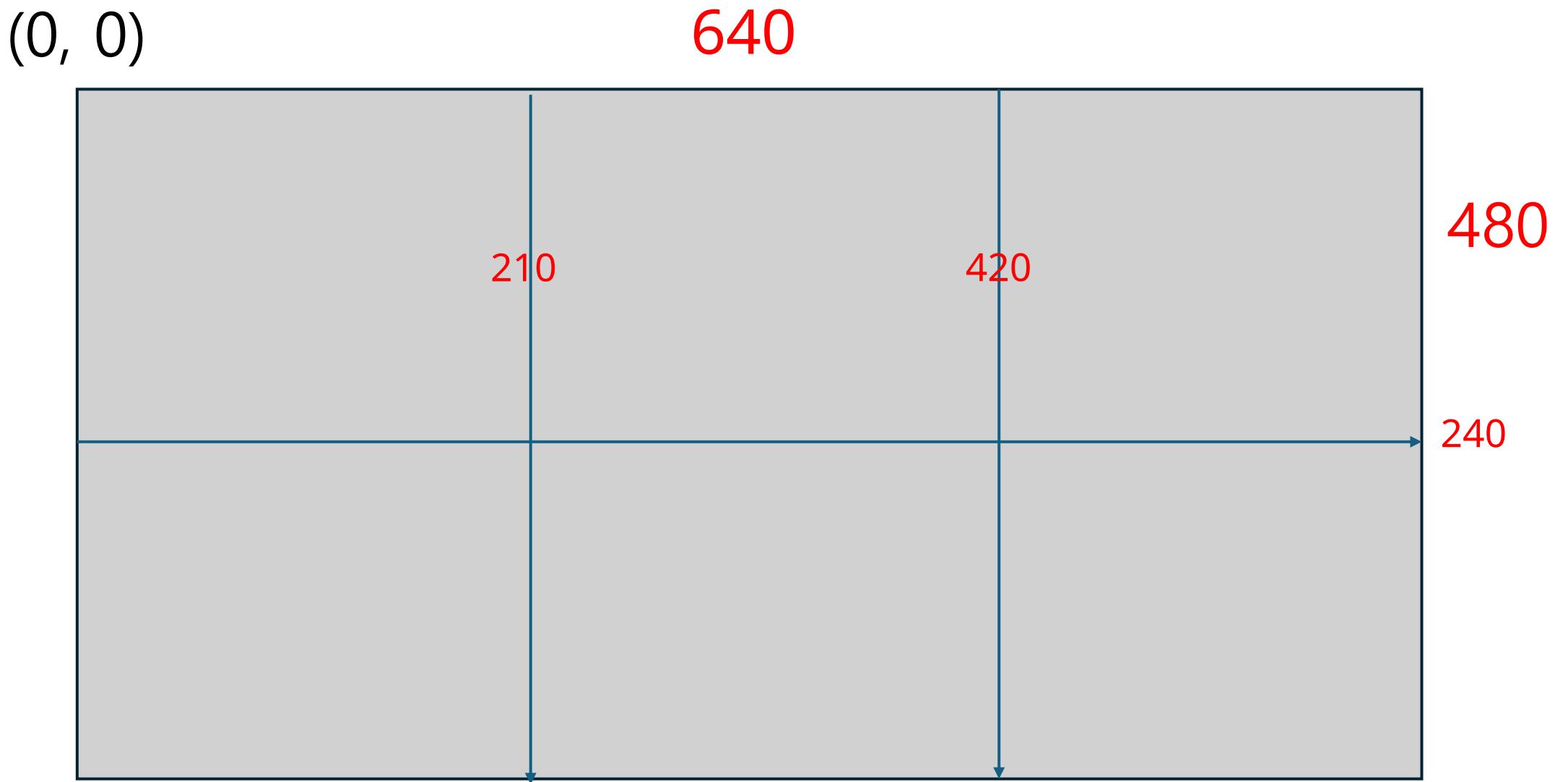


x y z

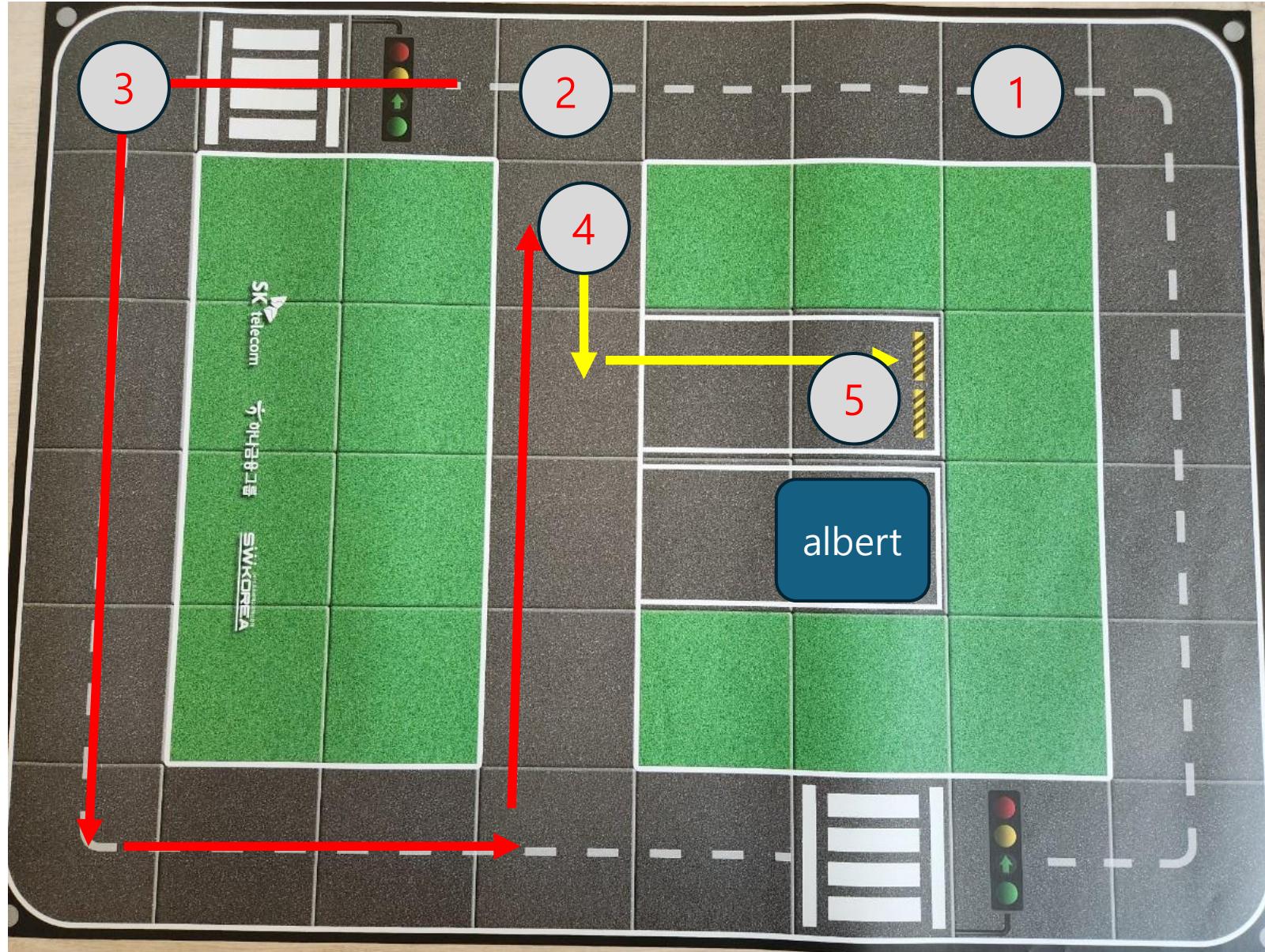
[250, 110, -100]

(480, 480)

# Display Camera



# Kamibot



1

Beep 2  
Speed: 50  
LED : Green  
Start

2

Stop  
Beep 2  
LED : Red  
Wait 1 sec  
LED : Green  
Start

3

Stop  
Beep 2  
LED : Red  
Wait 1 sec  
LED : Green  
Start

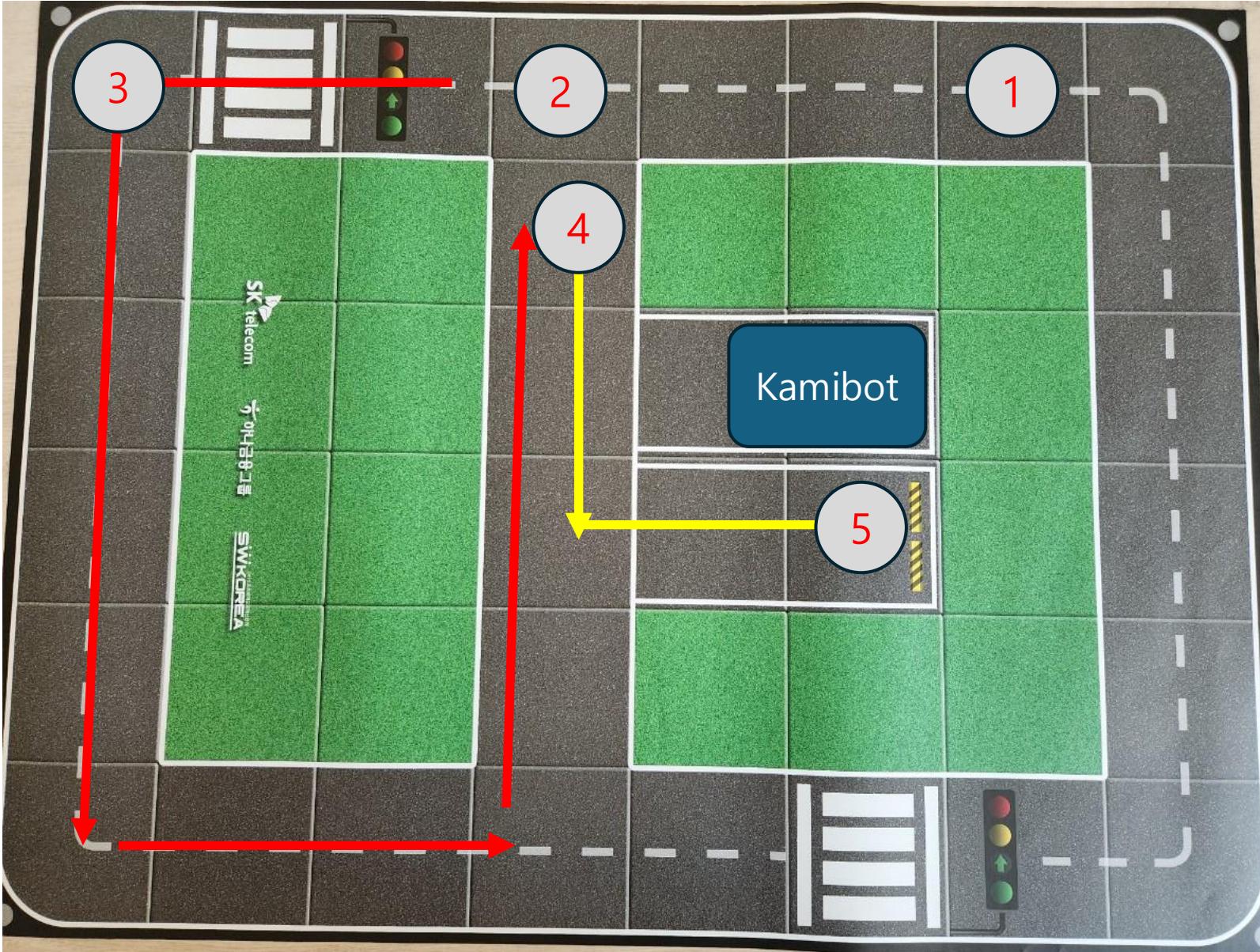
4

Beep 2  
Backward  
LED : Yellow

5

Stop  
LED : Blue  
Stop

# Albert



1

Beep 2  
Speed: 50  
LED : Green  
Start

2

Stop  
Beep 2  
LED : Red  
Wait 1 sec  
LED : Green  
Start

3

Stop  
Beep 2  
LED : Red  
Wait 1 sec  
LED : Green  
Start

4

Beep 2  
Backward  
LED : Yellow

5

Stop  
LED : Blue  
Stop

**THE END**