



인공지능 RPA

인공지능 RPA – 1주차

# 학습 내용

1. 과정 오리엔테이션
2. 실습환경 구축
3. 깃허브 실습



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# 과정 오리엔테이션

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## 세가지 방향

1. 인공지능 실습 (Python)
2. RPA 프로그래밍 with Fast API
3. 취업 준비 가이드



## \_수업 내용 소개

1. 데이터와 AI 다루기

2. 서비스 프로그래밍

3. 실습 언어 및 도구

: 파이썬



## \_수업 자료

### 교재

‘난생처음 데이터 분석 with Python’ (김규석, 2023, 한빛아카데미)

### 강의자료링크

<https://github.com/topmentor/RPA2024>

### 참고 링크

<https://wikidocs.net/book/9291>

<https://wikidocs.net/book/4639>



## **\_평가방법**

1. 출석 : 10%
  2. 중간고사 : 30%
  3. 기말고사 : 40%
  4. 수업실습 파일 commit (Github) : 20%
- 매주 실습 내용을 깃허브에 올려야 인정 됨



## \_기본 실습 과정

1. 'C:₩'에 자기학번으로 실습폴더 생성

1-1. 깃허브 계정 및 repo 생성

'RPA' 이름으로 repo 생성

2. 수업 예제 실습

3. 수업을 마치면 깃허브에 commit & push

commit 내용 → '1주차 실습'

```
git add .
```

```
git commit -m '1주차 실습'
```

```
git push -u https://github.com/자기계정/RPA HEAD:main
```





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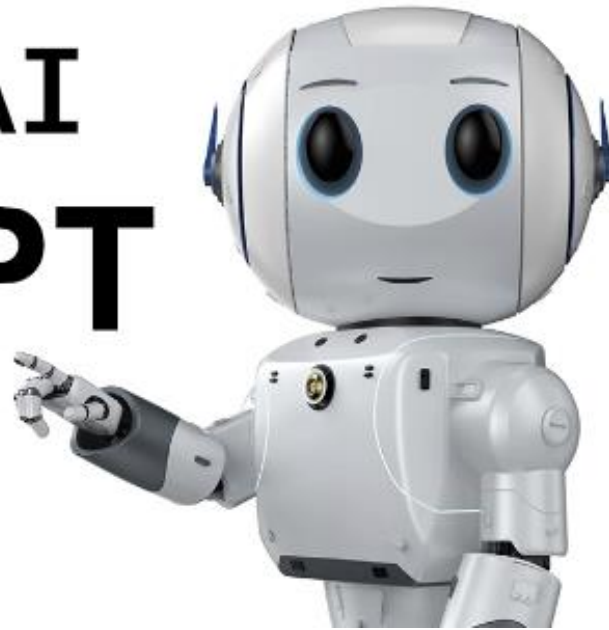
# 인공지능 실습

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\_우리의 인식을 바꾼 사건들 - 만드는 것도 기계가

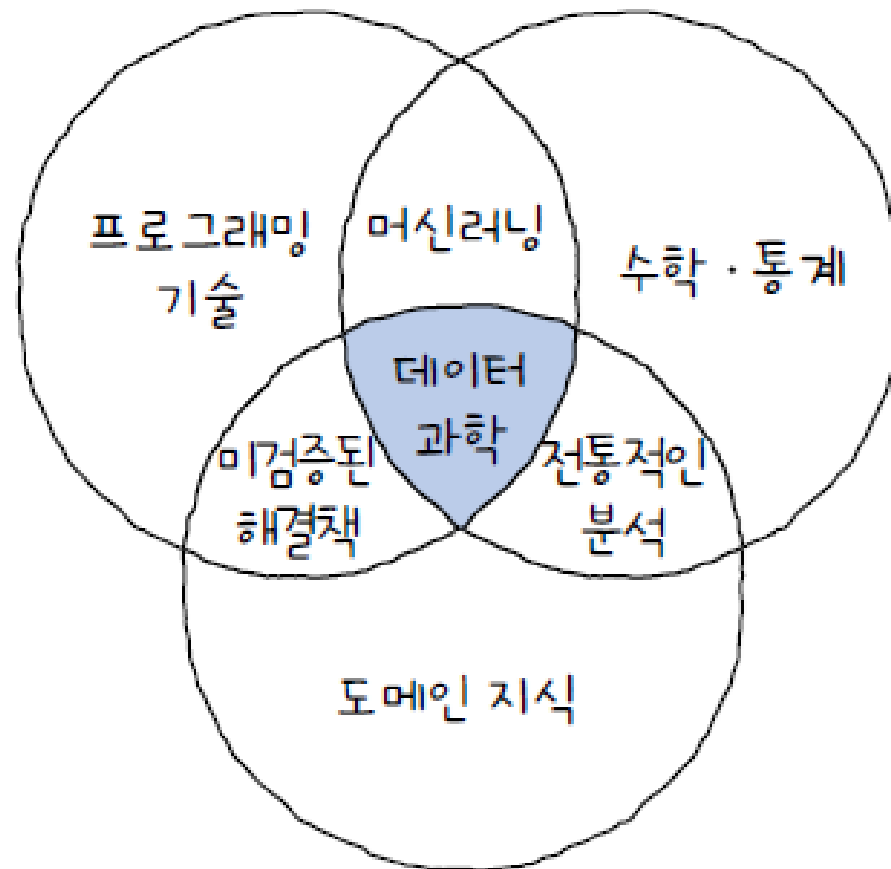
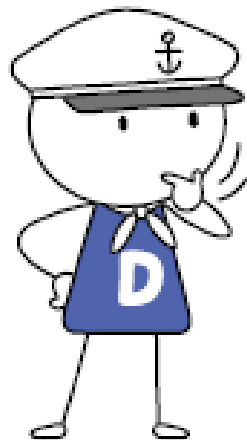
이젠 인공지능이 만든다 / 알려준다

 OpenAI  
**ChatGPT**



## \_관련해서 어떤 진로가 있는 가?

호오, 데이터 분석가는  
이런 기술이 필요하군요.



## \_기본 셋팅

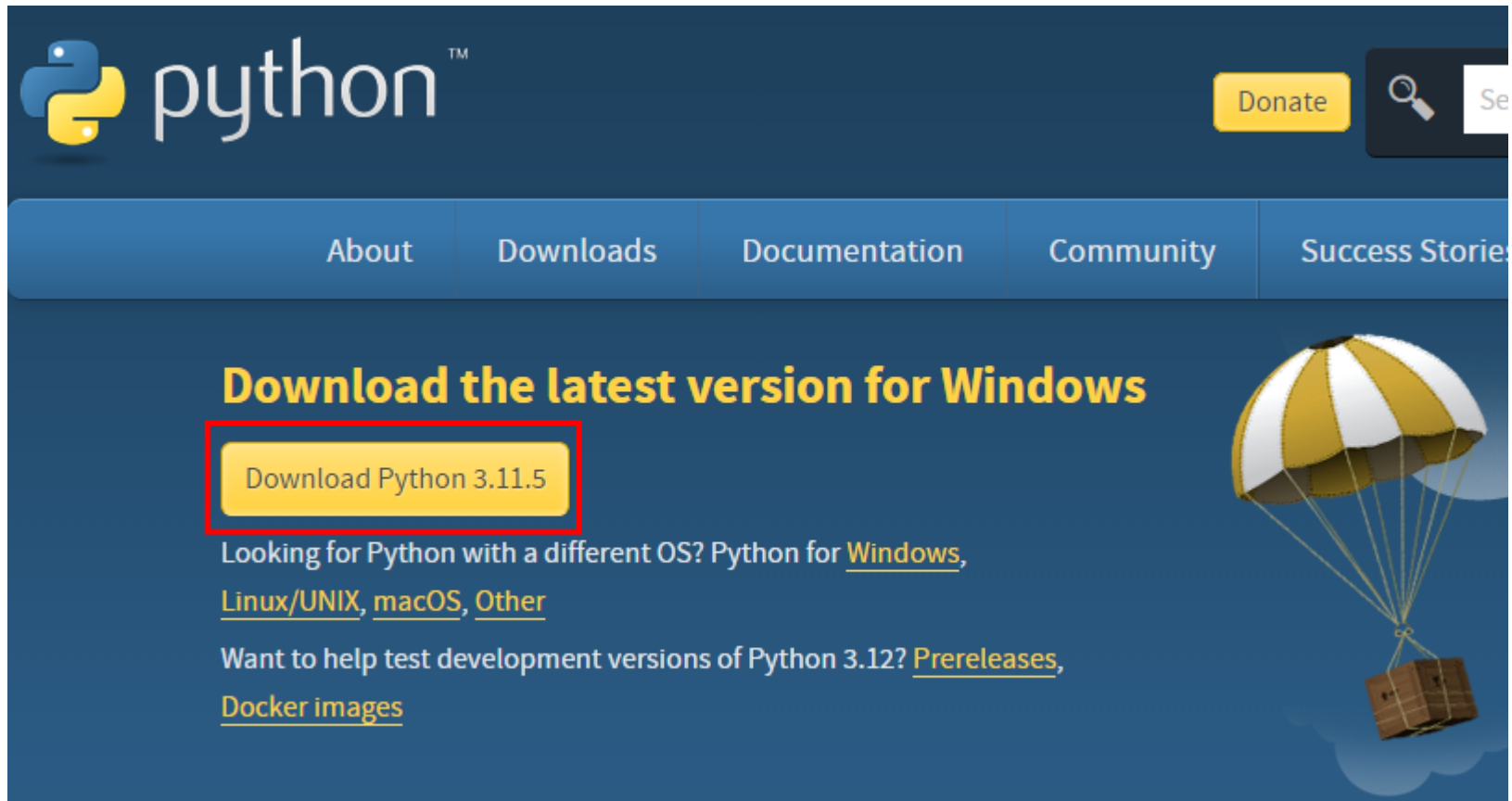
파이썬 설치하기(세 가지 소프트웨어를 설치해야 함)

1. 파이썬 컴파일러
2. 통합 개발 환경(IDE, integrated development environment)
3. 모듈(라이브러리) - 옵션

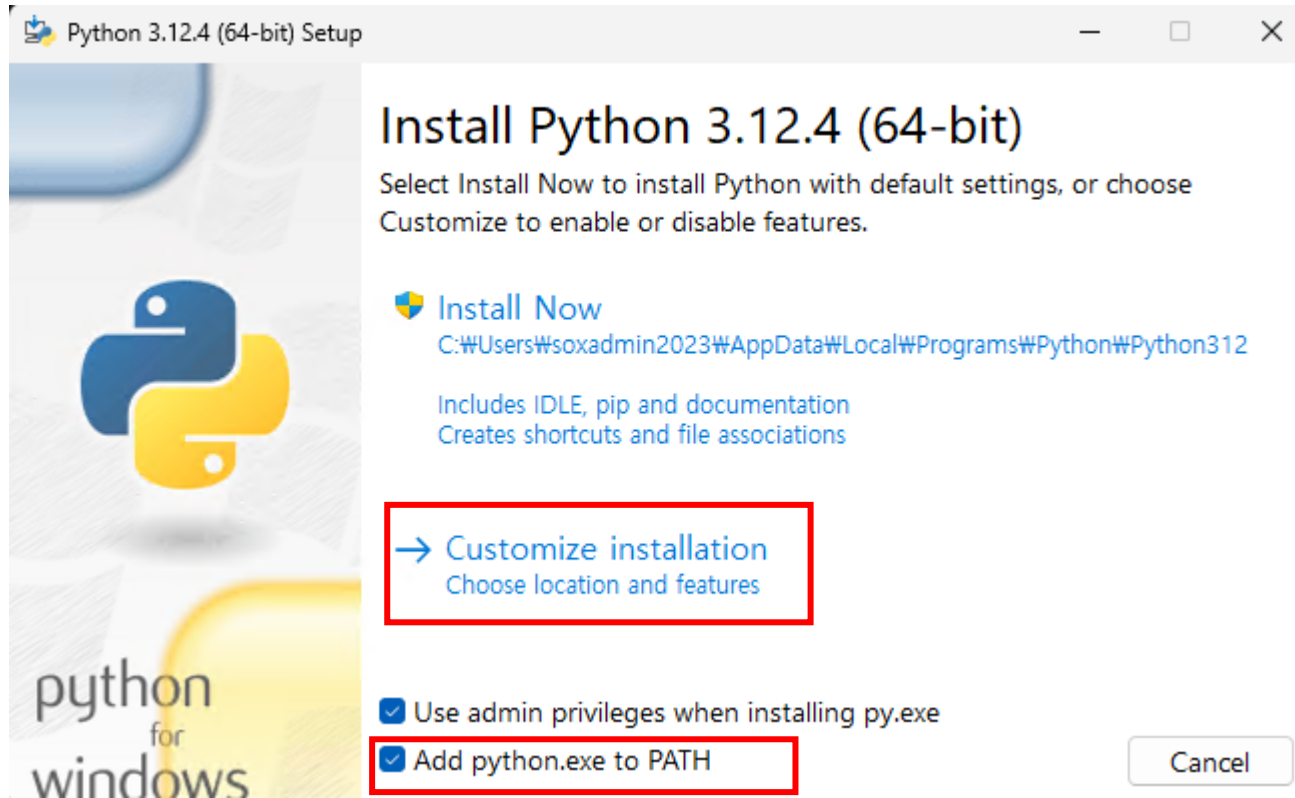


## \_도구 설치

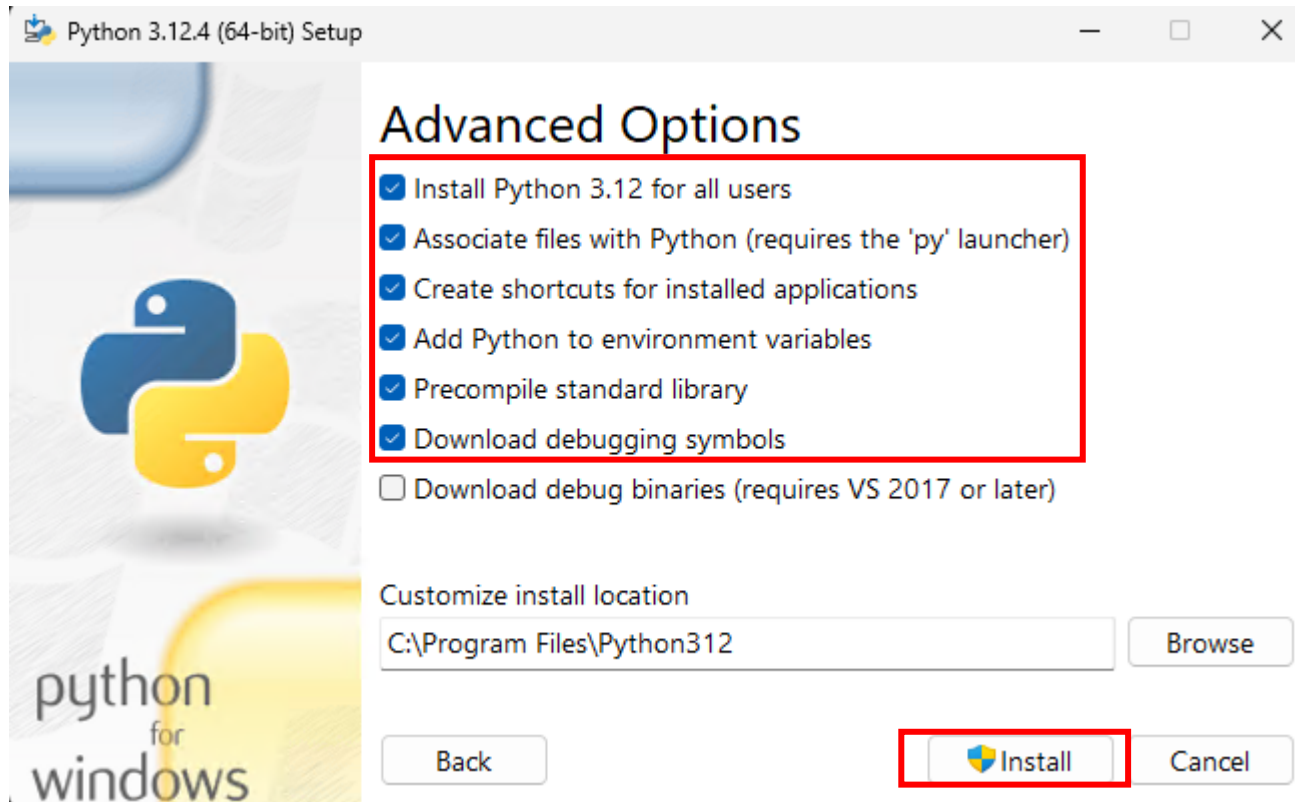
<https://www.python.org/downloads/>



## \_도구 설치



## \_도구 설치



# \_도구 설치

<https://code.visualstudio.com>

The image shows the Visual Studio Code website on the left and the VS Code application interface on the right.

**Left Panel (Website):**

- Header: Code editing. Redefined.
- Text: Free. Built on open source. Runs everywhere.
- Download button: **Download for Windows** (Stable Build) with a dropdown arrow.
- Text: Web, Insiders edition, or other platforms
- Text: By using VS Code, you agree to its license and privacy statement.

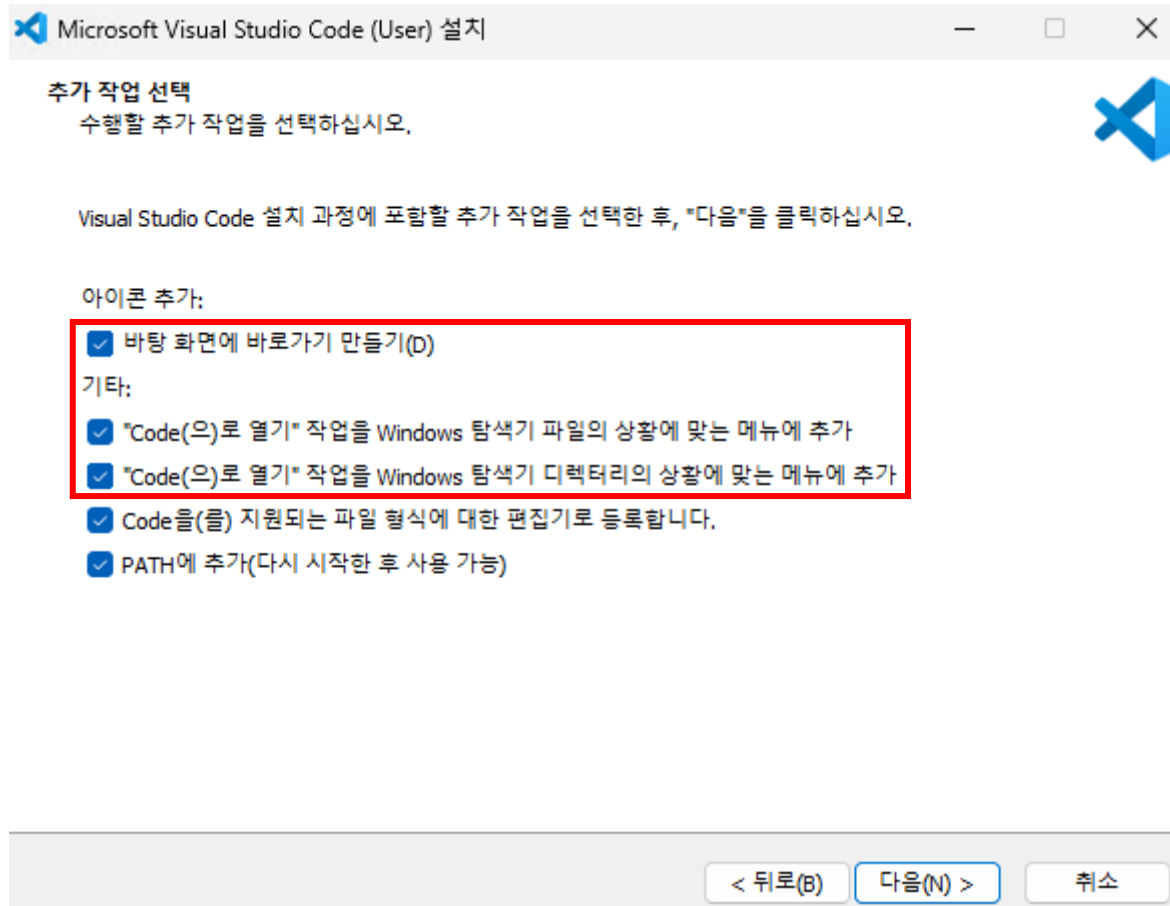
**Right Panel (VS Code Interface):**

- Menu: File, Edit, Selection, View, Go, Debug, Terminal, Help
- Tab: serviceWorker.js - create react app - Visual Studio Code - In...
- Left sidebar: EXTENSIONS: MARKETPLACE, @sortinstalls
- Extension list:
  - Python 2019.6.24021 (54.9M, 4.5 stars, Install)
  - GitLens — Git sup... (9.8.5, 23.1M, 5 stars, Install)
  - C/C++ 0.24.0 (23M, 3.5 stars, Install)
  - ESLint 1.9.0 (21.9M, 4.5 stars, Install)
  - Debugger for Ch... (4.11.6, 20.6M, 4 stars, Install)
  - Language Supp... (0.47.0, 18.7M, 4.5 stars, Install)
  - vscode-icons 8.8.0 (17.2M, 5 stars, Install)
  - Vetur 0.21.1 (17M, 4.5 stars, Install)
  - C# 1.21.0 (15.6M, 4 stars, Install)
- Editor: JS serviceWorker.js, showing code for register and serviceWorker.ready.then().
- Terminal: 1: node, showing output: You can now view create-react-app in the browser. Local: http://localhost:3000/, On Your Network: http://10.211.55.3:3000/
- Status bar: master, 0 errors, 0 warnings, 0 info, Ln 43, Col 19, Spaces: 2, UTF-8, LF, JavaScript

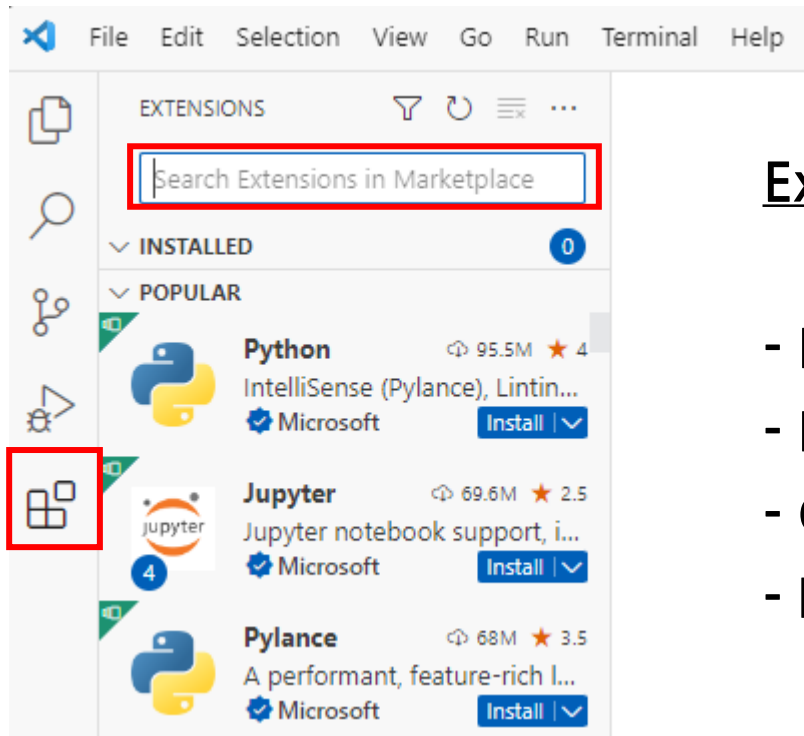




## 도구 설치



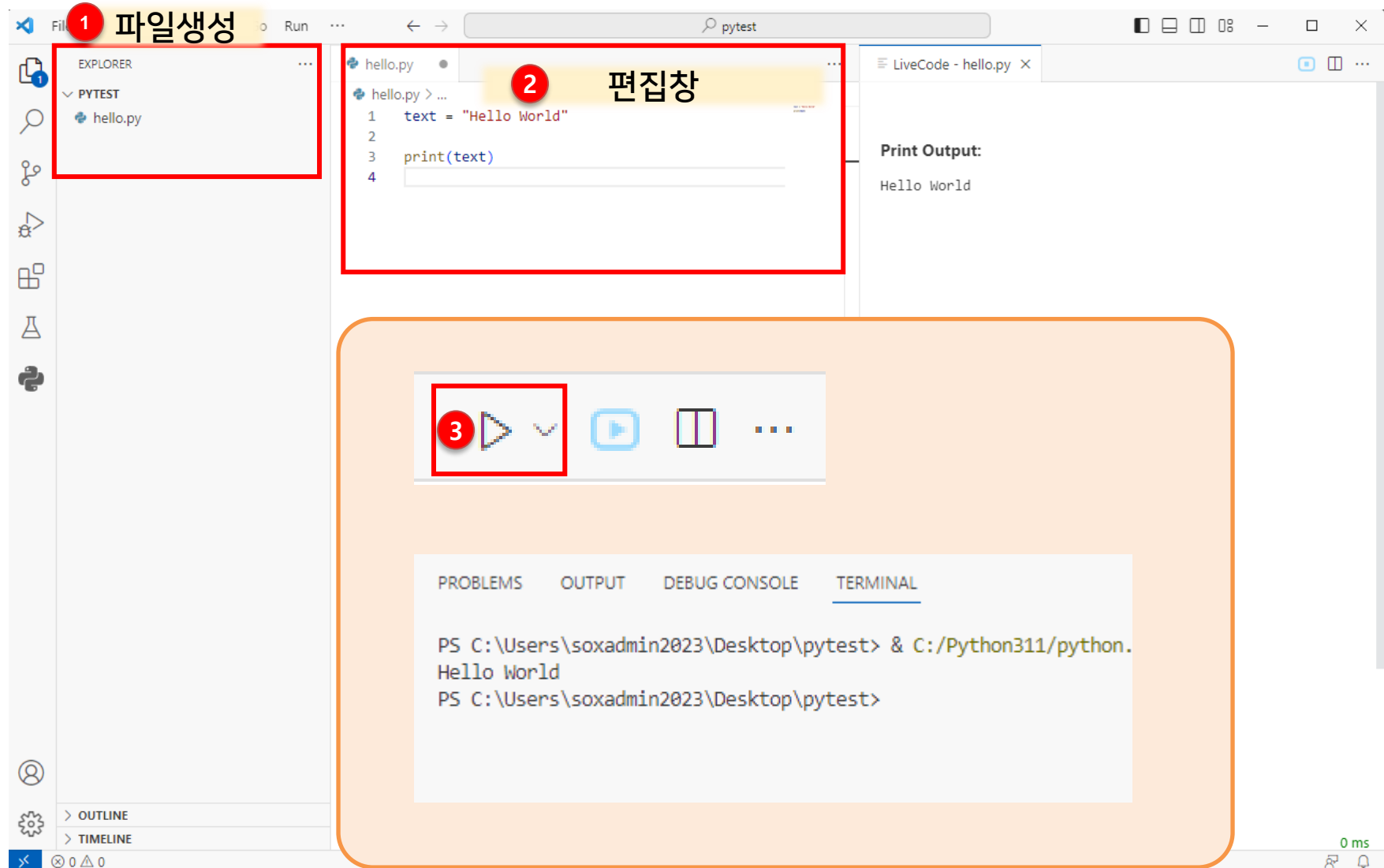
# \_도구 설치



## Extension 설치

- Python
- Python Extension Pack
- Code Runner
- Korean Language Pack for Visual Studio

# \_기본 실습 방법



## \_실습 1

```
text = "Hello World"
```

```
print(text)
```



## \_실습 1

파이썬 코드로 자기 소개 출력하기

1. 이름
2. 학번
3. 개인 깃허브 링크
4. 희망하는 진로

```
print("이름 : ")  
print("학번 : ")  
print("개인 깃허브 링크 :")  
print("진로 : ")
```



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# RPA 실습

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## \_Git : 로컬 환경 구축

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

### Download for Windows

[Click here to download](#) the latest (2.45.1) 64-bit version of **Git for Windows**. This is the most recent [maintained build](#). It was released **5 days ago**, on 2024-05-14.

#### Other Git for Windows downloads

Standalone Installer

[32-bit Git for Windows Setup.](#)

[64-bit Git for Windows Setup.](#)

Portable ("thumbdrive edition")

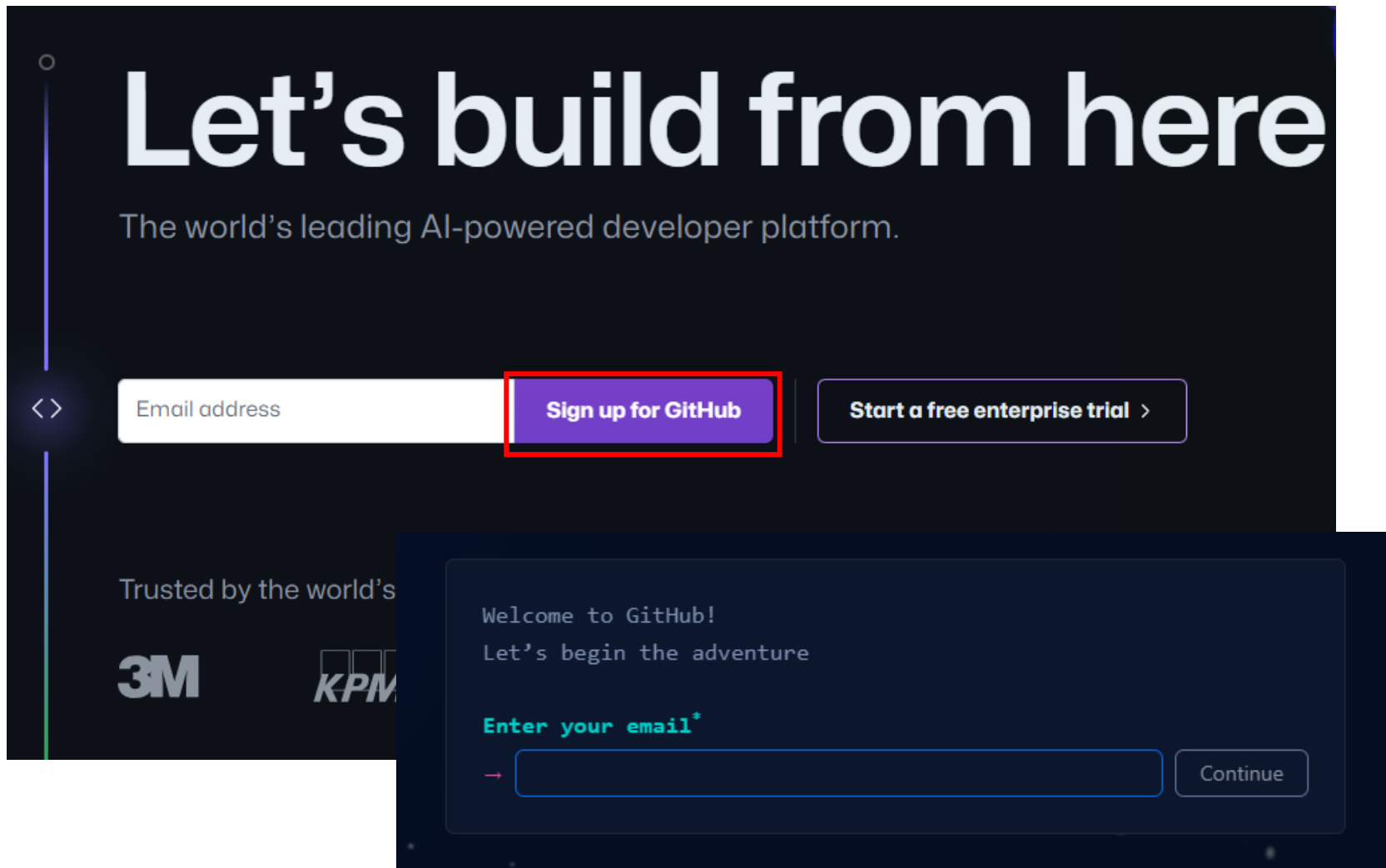
[32-bit Git for Windows Portable.](#)

[64-bit Git for Windows Portable.](#)



## \_Github 가입

<https://github.com>



# Let's build from here

The world's leading AI-powered developer platform.

<> Email address **Sign up for GitHub** Start a free enterprise trial >

Trusted by the world's

3M KPMG

Welcome to GitHub!  
Let's begin the adventure

Enter your email\*

→  Continue





# \_Github : repo 생성

<https://github.com/자기계정>


Overview

Repositories 15

Projects

Packages

Stars



**Roi Kim**  
topmentor  
[Edit profile](#)

Type ▾Language ▾Sort ▾[New](#)

**RPA2024** Public

☆ Star ▾

Updated 3 weeks ago

**PyClass** Private

☆ Star ▾

Updated 3 weeks ago

**edutest** Public

☆ Star ▾

GIT 테스트 repo

Updated on May 30



# \_Github : repo 생성

## 'RPA' repo 생성


### Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere?

[Import a repository.](#)

Required fields are marked with an asterisk (\*).

Owner \*

 topmentor ▾

Repository name \*

RPA

RPA is available.

Great repository names are short and memorable. Need inspiration? How about [probable-memory](#) ?

Description (optional)

☒  **Public**

Anyone on the internet can see this repository. You choose who can commit.

☐  **Private**

You choose who can see and commit to this repository.

Initialize this repository with:

☐ Add a README file

This is where you can write a long description for your project. [Learn more about READMEs.](#)

Add .gitignore

.gitignore template: None ▾

Choose which files not to track from a list of templates. [Learn more about ignoring files.](#)

Choose a license

License: None ▾

A license tells others what they can and can't do with your code. [Learn more about licenses.](#)

 You are creating a public repository in your personal account.

Create repository



# \_Github : repo 생성

## 'RPA' repo 주소 복사해 두기



### Start coding with Codespaces

Add a README file and start coding in a secure, configurable, and dedicated development environment.

Create a codespace



### Add collaborators to this repository

Search for people using their GitHub username or email address.

Invite collaborators

### Quick setup — if you've done this kind of thing before

Set up in Desktop

or

HTTPS

SSH

`https://github.com/topmentor/RPA2024.git`



Get started by [creating a new file](#) or [uploading an existing file](#). We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#).

### ...or create a new repository on the command line

```
echo "# RPA2024" >> README.md
git init
git add README.md
git commit -m "first commit"
git branch -M main
git remote add origin https://github.com/topmentor/RPA2024.git
git push -u origin main
```



### ...or push an existing repository from the command line

```
git remote add origin https://github.com/topmentor/RPA2024.git
git branch -M main
git push -u origin main
```



💡 ProTip! Use the URL for this page when adding GitHub as a remote.



## \_Github : repo 연결

'C:\₩자기학번' 으로 폴더 생성 후 경로 이동

```
echo "# RPA" >> README.md
```

```
git init
```

```
git config --global user.email "홍길동@naver.com"
```

```
git config --global user.name "홍길동"
```

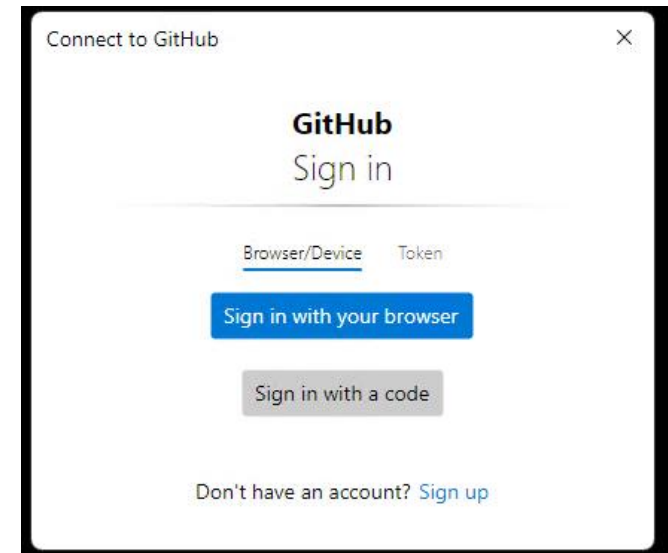
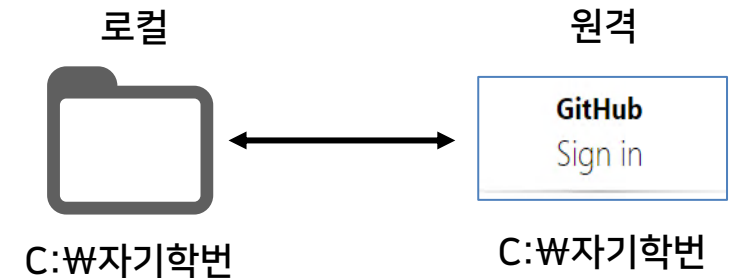
```
git add README.md
```

```
git commit -m "first commit"
```

```
git branch -M main
```

```
git remote add origin https://github.com/자기계정/RPA.git
```

```
git push -u origin main
```



## \_Git : 기본 사용

- git에 올릴 파일의 편집

파일 편집

- staging area는 commit을 하기 전에 commit할 파일들을 골라놓는 곳

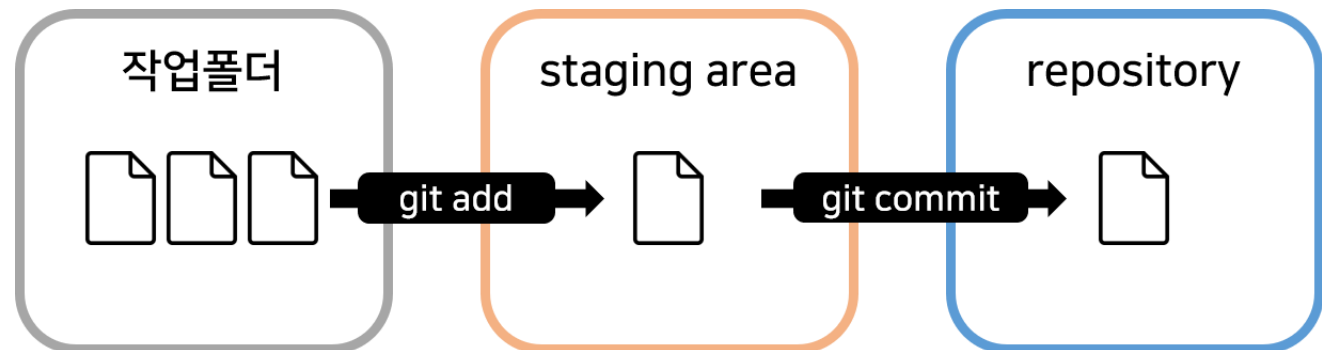
`git add .`

`git status`

- repository는 commit된 파일의 버전들을 모아놓는 곳 (로컬)

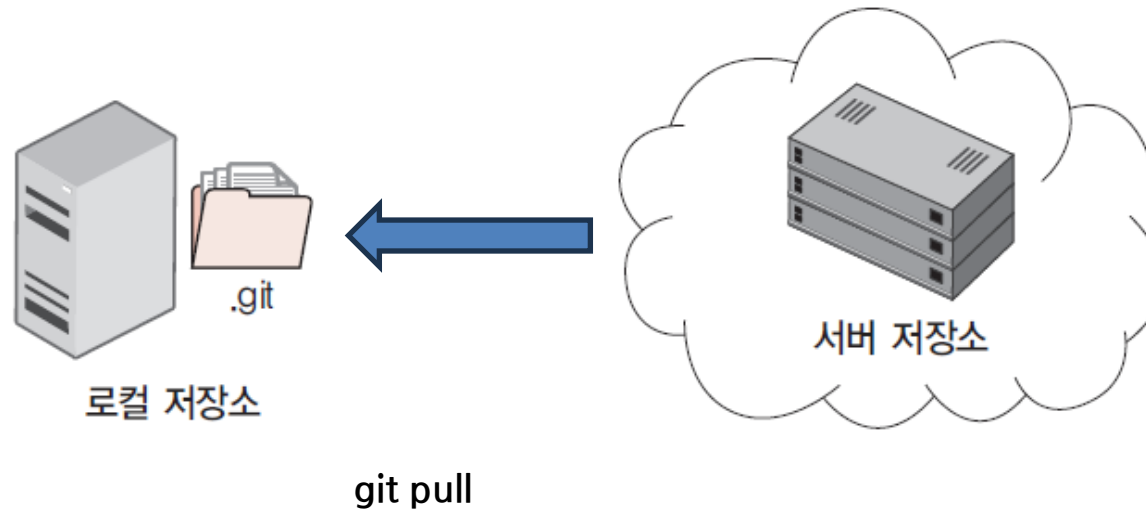
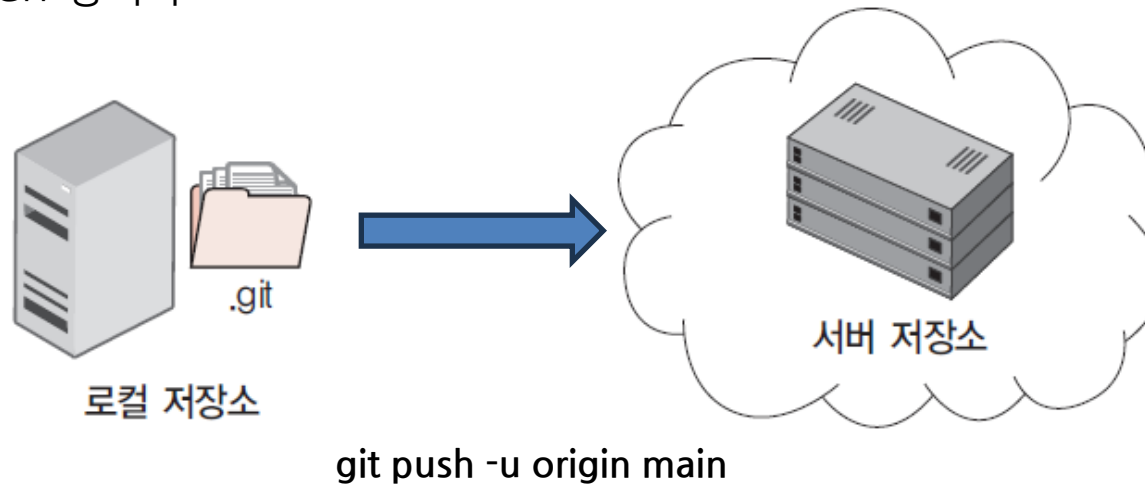
`git commit -m '메세지'`

`git log --stat`



## \_Git : 원격과 연결하기

- 로컬 GIT과 원격 GIT 동기화



## **\_Git : 원격과 연결하기**

금일 실습 내용을 git으로 업로드(push) 하시오.

```
git add .
```

```
git commit -m "1주차 실습파일"
```

```
git pull
```

```
git push -u origin main
```

