

1인1프로그래밍언어 마스터제

집중프로그래밍언어(코딩클리닉) 교육

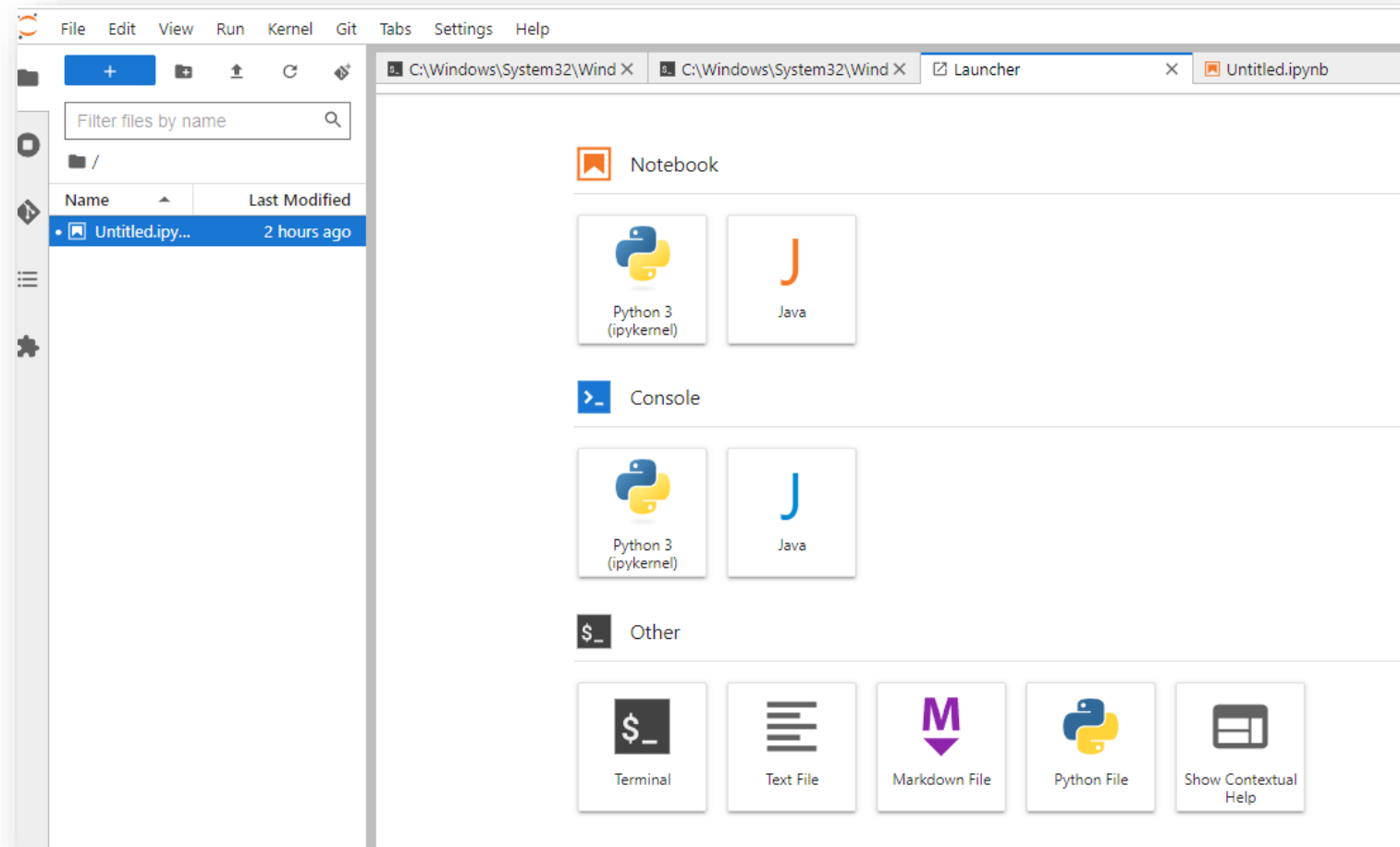
전남대학교 SW중심대학사업단

[자바 활용(1)] 자바 환경 만들기

1. 파이썬 설치(버전 3.11.x) [옵션체크] Add Python 3.11.x to PATH
 - <https://www.python.org/downloads>
2. 자바 설치(최신버전)
 - <https://www.oracle.com/java/technologies/downloads>
3. Jupyterlab 설치 및 환경구성 파워셸 프롬프트 실행하여 작업
 - 실습할 폴더 생성 및 이동: `mkdir d:\Wjava; cd d:\Wjava`
 - Jupyterlab 설치: `pip install jupyterlab`
 - 자바커널 다운로드 및 압출해제: <https://github.com/SpencerPa가/IJava/releases/ijava-1.3.0.zip>
 - 작업위치: `cd d:\Wjava\ijava-1.3.0`
 - 환경구성 및 자바커널 추가
 - `$Env.Path += 'C:\WProgram Files\Java\jdk-21\bin'` ; `cat Env:Path`
 - `$Env.JAVA_HOME='C:\WProgram Files\Java\jdk-21'` ; `cat Env:JAVA_HOME`
 - `python install.py` <= 자바커널 추가
 - `ijsinstall` <= 자바커널 추가
 - `pip install -upgrade "jupyterlab<4" jupyterlab-git` <= jupyterlab git extension 설치
4. 주피터랩 실행: `jupyter lab`

```
C:\WUsers\유재명\python2>jupyter lab
[2023-10-05 10:54:51.615 ServerApp] Package jupyterlab took 0.0000s to import
[2023-10-05 10:54:51.647 ServerApp] Package jupyter_lsp took 0.0373s to import
[W 2023-10-05 10:54:51.647 ServerApp] A `_jupyter_server_extension_points` function
ated in future releases of Jupyter Server.
[2023-10-05 10:54:51.662 ServerApp] Package jupyter_server_fileid took 0.0066s to
```

실행화면



[자바활용(3)] 로컬컴퓨터 :: ssh 환경구성

github ssh key pair 방식 이용하기

1. SSH 환경구성: `cd ~ ; mkdir .ssh;`
2. 명령프롬프트에서 ssh key pair 생성

`ssh-keygen.exe`

`id_rsa` : 개인키

`id_rsa.pub` : 공개키

3. 메모장에서 `~/.ssh/config` 편집

4. Github에서 java 저장소 만들기
5. Github에서 공개키 등 등록
6. 별칭 등록


```
git remote add ssh-origin git@github.com:[my-id]/java.git
git push -u ssh-origin main
```

```
PS C:\Users\master\.ssh> ssh-keygen.exe
Generating public/private rsa key pair.
Enter file in which to save the key (C:\Users\master\.ssh\id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in C:\Users\master\.ssh\id_rsa
Your public key has been saved in C:\Users\master\.ssh\id_rsa.pub
The key fingerprint is:
SHA256:NAa9UL0cYS9IoCcmXu3BrLgNHc0kmBraL9Xy03nKPow master@DESKTOP-S3CV8RN
The key's randomart image is:
+---[RSA 3072]-----+
|  . 00.0+0          |
| * = 0+00.          |
| = 0 *. =0. .       |
| 0 * B.+.. .        |
| . + 0...S          |
| . +0 .              |
| ... = .             |
| ... E.* .           |
| . 0...=*            |
+---[SHA256]-----+
```

`~/.ssh/config`

```
Host github.com
  Hostname github.com
  IdentityFile ~/.ssh/id_rsa
```

[자바활용(2)] github :: ssh 공개키 등록

**Yoo JaeMyeong (yoojaemyeong)**
Your personal account [Switch settings context](#)

[Go to your personal profile](#)

Public profile

Account

Appearance

Accessibility

Notifications

Access

Billing and plans

Emails

Password and authentication

Sessions

SSH and GPG keys

Organizations

Enterprises

Moderation

Code, planning, and automation

Add new SSH Key

Title

ssh-java

Key type

Authentication Key

Key

```
ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAQgQDLoFzgcuNrMSzrGzWkOFyeWc8wQGSaECnzR9UYMxuXQsiOMOkYA55sTyJWtB2j5MFaWNdpLskrBtb7tIp
Ex6x1TxSgew2sgNamra5q11a68D0nPPKjbC1AaDRo30VkbQPAaXG//OqUDqHgTn+73NXpHY3klrxV7FFKLlBzmHkb8GUXCEI+Km6LUFaebpUGRARgc
yPnedv3wJ9MlgmspxUeMB6PrmmHo8aCRR/gq4pEc8wPS3bq85Ux9/8kuXcGDachsJe5VYMfLwVA+zAd6A7cd1B3uM= master@DESKTOP-S3CV8RN
```

Add SSH key