


문제 해결을 위한 데이터 분석 및 시각화

java 설치

wordcloud 설치

한성대학교 노은희 교수

“미래로 향하는 새로운 이정표”



자바 설치/wordcloud 라이브러리 설치

자바 설치하기_windows

JDK설치하기

<https://www.oracle.com/java/technologies/downloads/#jdk18-windows>

The screenshot shows the Oracle Java Downloads page for JDK 18 on Windows. The page has a dark navigation bar with links for 'Java downloads', 'Tools and resources', and 'Java archive'. Below the navigation bar, there is a section for 'Java 18' and 'Java 17'. The 'Java 18' section is highlighted, and the 'Java SE Development Kit 18.0.1.1 downloads' are listed. A table provides details for the downloads, including the product/file description, file size, and download link. The download link for the 'x64 Installer' is highlighted with a red dashed box.

Java downloads Tools and resources Java archive

JDK 17 will receive updates under these terms, until at least September 2024.

Java 18 Java 17

Java SE Development Kit 18.0.1.1 downloads

Thank you for downloading this release of the Java™ Platform, Standard Edition Development Kit (JDK™). The JDK is a development environment for building applications and components using the Java programming language.

The JDK includes tools for developing and testing programs written in the Java programming language and running on the Java platform.

Linux macOS Windows

Product/file description	File size	Download
x64 Compressed Archive	172.8 MB	https://download.oracle.com/java/18/latest/jdk-18_windows-x64_bin.zip (sha256 🔗)
x64 Installer	153.38 MB	https://download.oracle.com/java/18/latest/jdk-18_windows-x64_bin.exe (sha256 🔗)
x64 MSI Installer	152.26 MB	https://download.oracle.com/java/18/latest/jdk-18_windows-x64_bin.msi (sha256 🔗)

자바 설치하기_maxOS [설치참고<https://jsikim1.tistory.com/191>]

JDK설치하기 버전 1.7이상의 자바가 설치되어 있어야 함

Java Downloads | Oracle

oracle.com/java/technologies/downloads/#jdk18-mac

Java downloads Tools and resources Java archive

JDK 18 will receive updates under these terms, until September 2022 when it will be superseded by JDK 19

JDK 17 will receive updates under these terms, until at least September 2024.

Java 18 Java 17

Java SE Development Kit 18.0.1.1 downloads

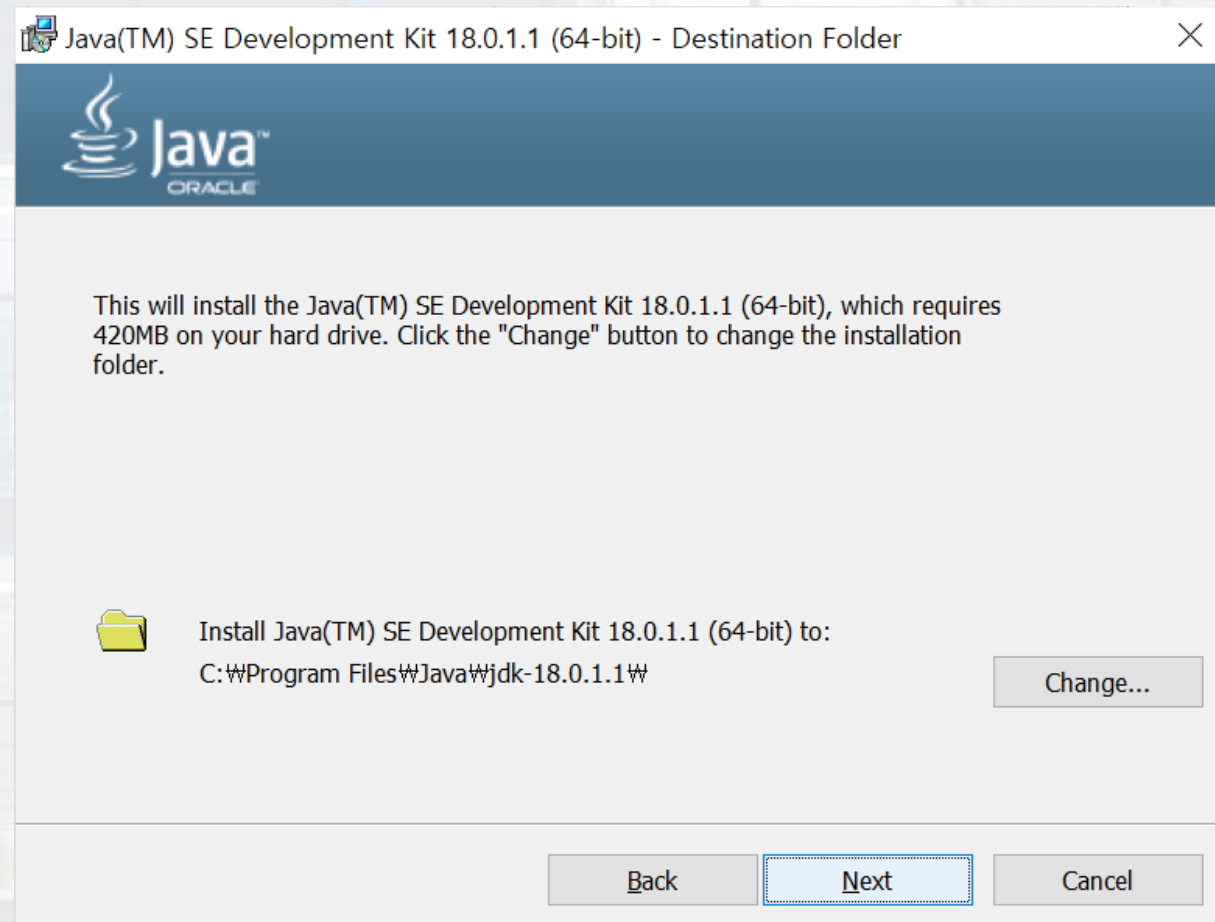
Thank you for downloading this release of the Java™ Platform, Standard Edition Development Kit (JDK™). The JDK is a development environment for building applications and components using the Java programming language.

The JDK includes tools for developing and testing programs written in the Java programming language and running on the Java platform.

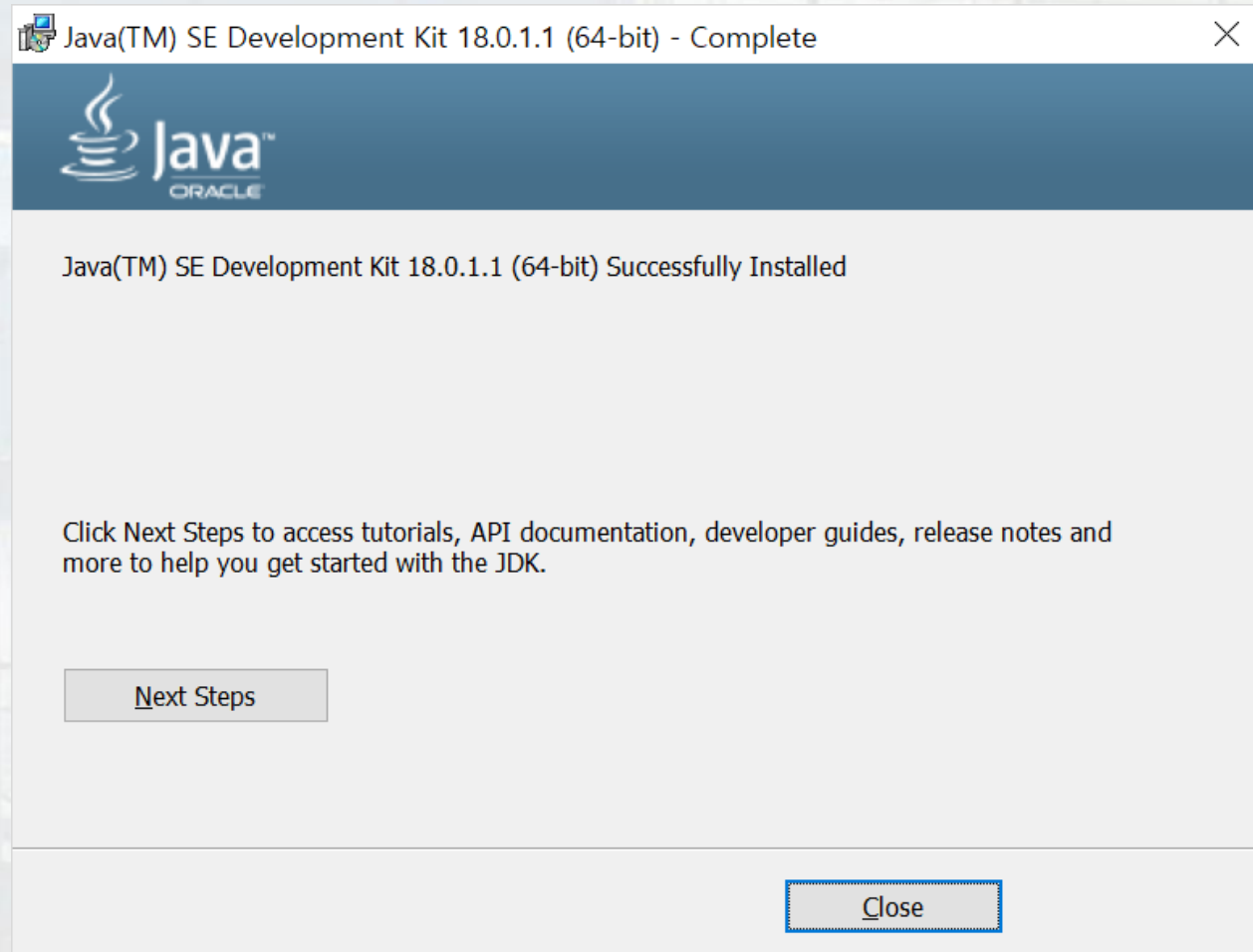
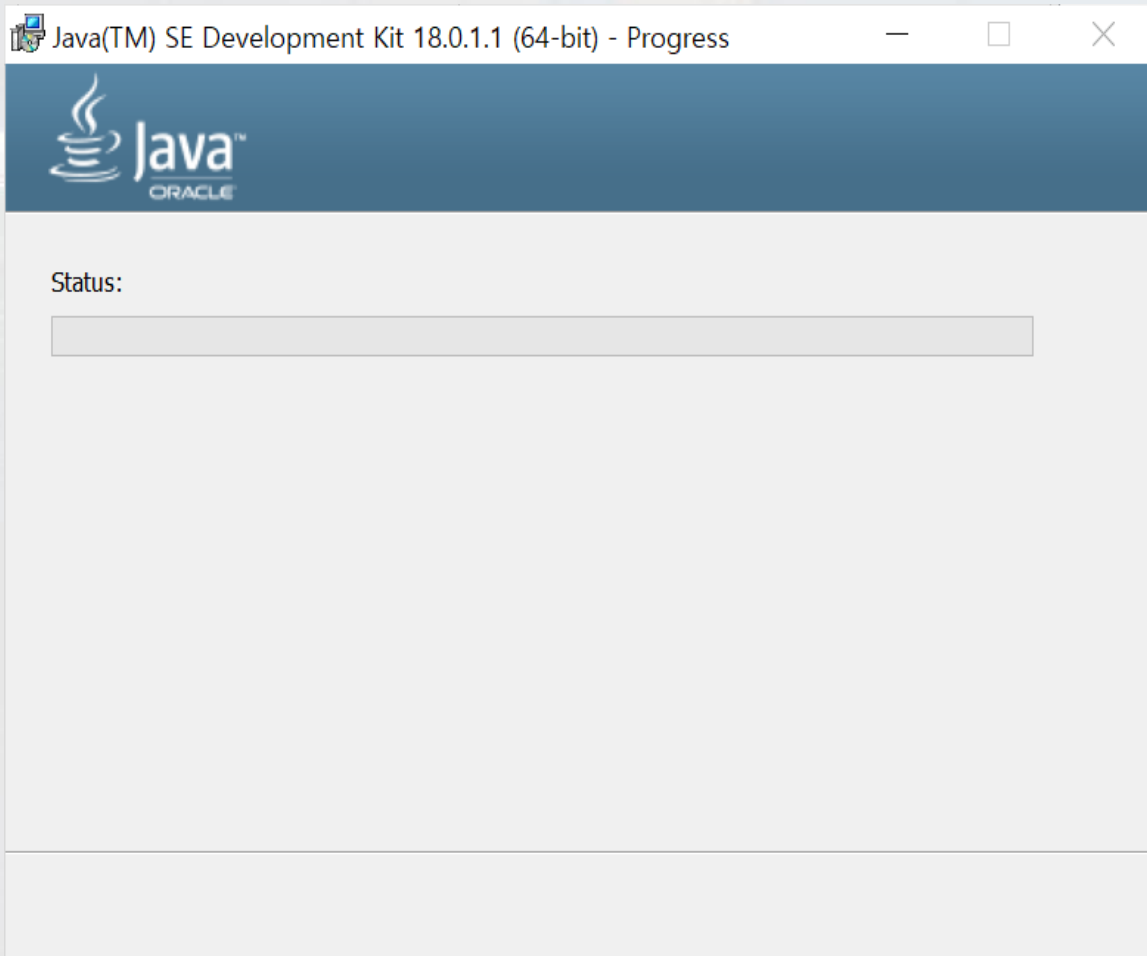
Linux macOS Windows

Product/file description	File size	Download
Arm 64 Compressed Archive	168.42 MB	https://download.oracle.com/java/18/latest/jdk-18_macos-aarch64_bin.tar.gz (sha256 🔗)
Arm 64 DMG Installer	167.81 MB	https://download.oracle.com/java/18/latest/jdk-18_macos-aarch64_bin.dmg (sha256 🔗)
x64 Compressed Archive	170.47 MB	https://download.oracle.com/java/18/latest/jdk-18_macos-x64_bin.tar.gz (sha256 🔗)
x64 DMG Installer	169.86 MB	https://download.oracle.com/java/18/latest/jdk-18_macos-x64_bin.dmg (sha256 🔗)

자바 설치

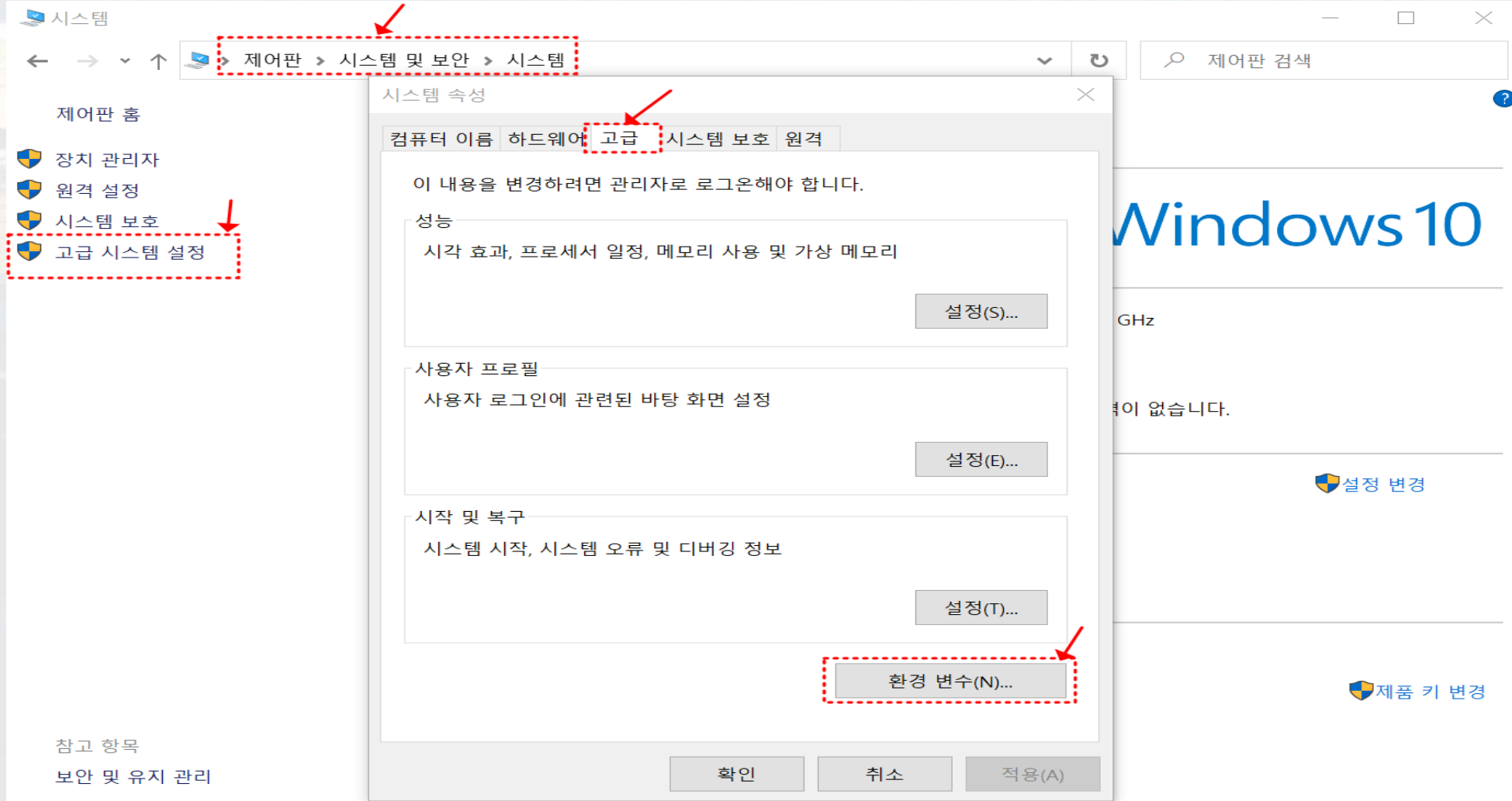


자바 설치



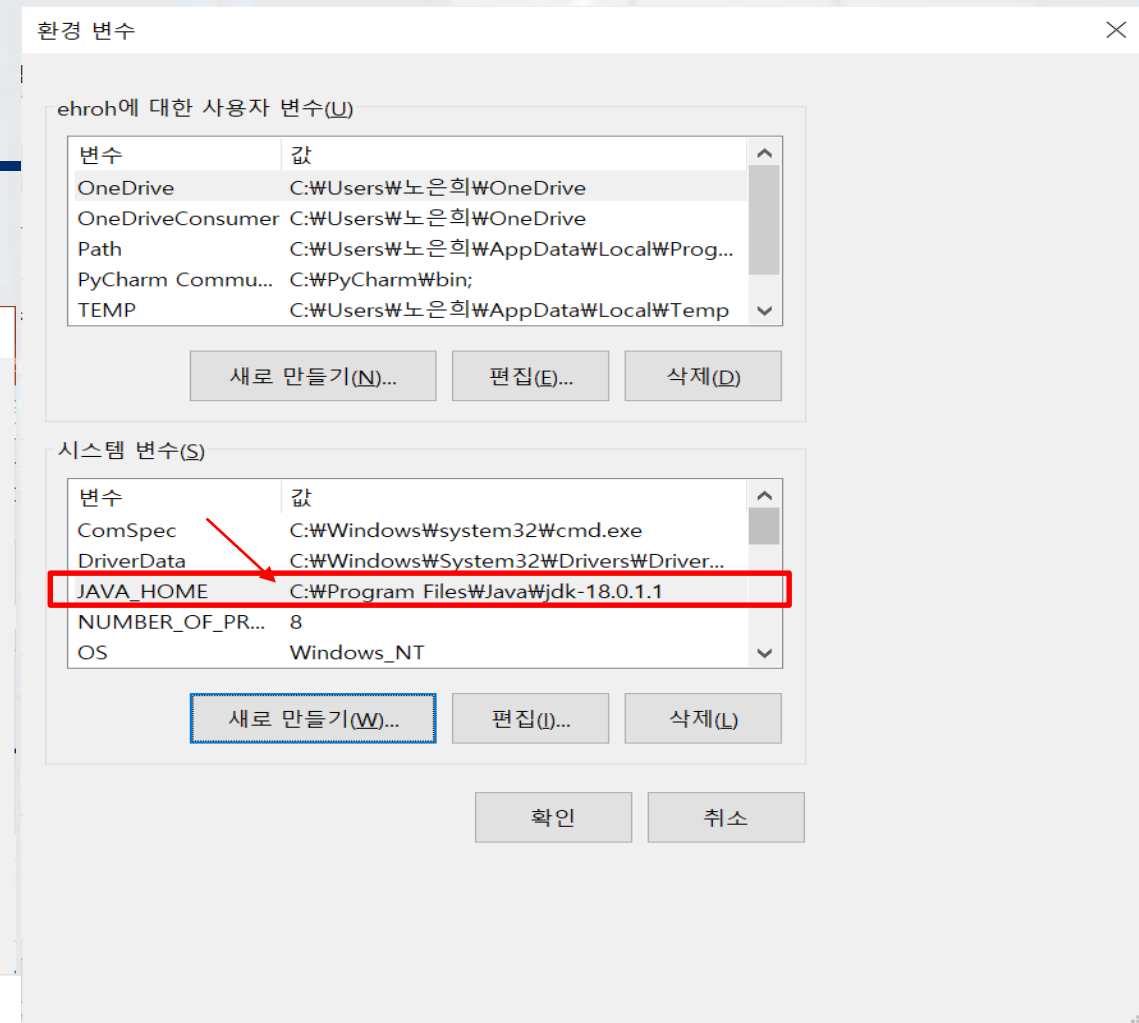
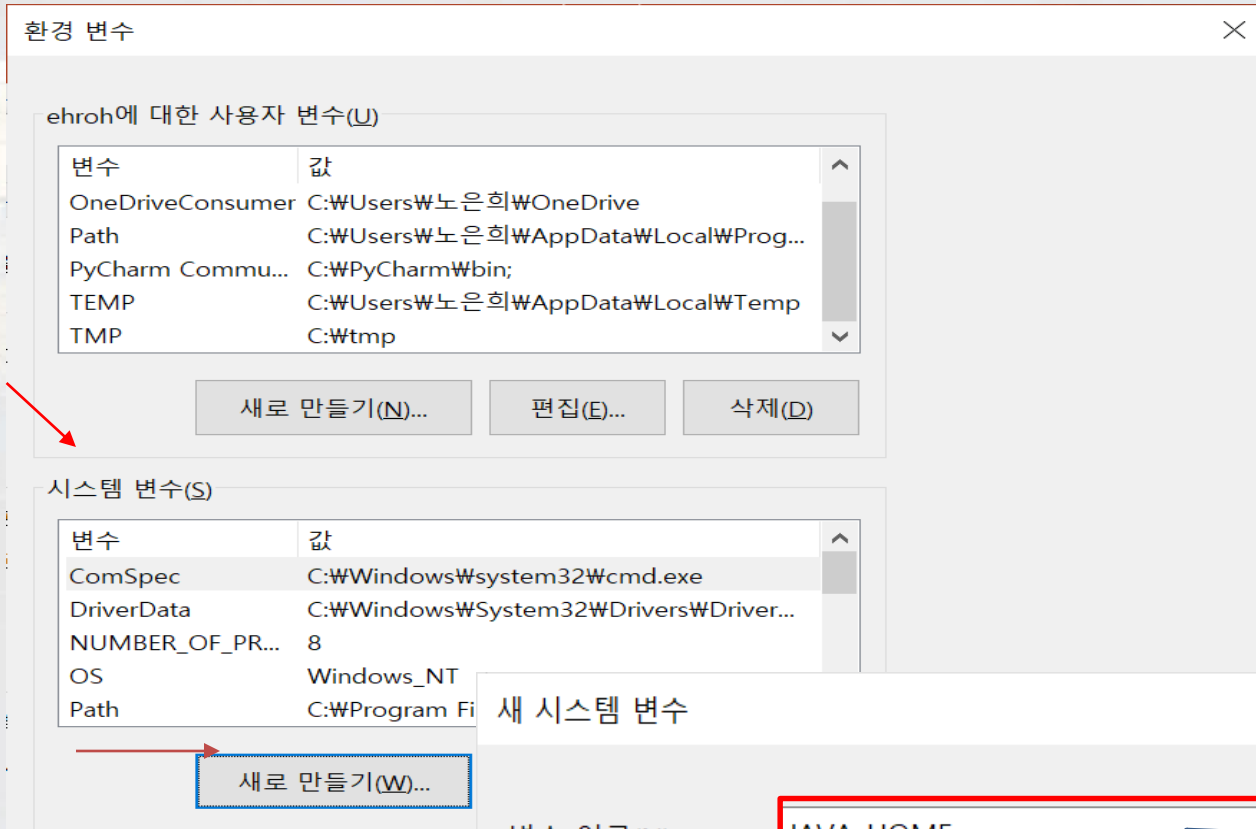
환경변수 설정하기

[제어판]->[시스템및 보안]->[시스템]->고급 시스템 설정->고급 ->환경변수



환경변수 설치하기

시스템변수->[새로만들기] 버튼 클릭



새 시스템 변수

변수 이름(N):

JAVA_HOME

변수이름 넣기

변수 값(V):

C:\Program Files\Java\jdk-18.0.1.1


본인이 설치한 jdk경로 넣기

디렉터리 찾아보기(D)...

파일 찾아보기(E)...

확인

취소



워드 클라우드 설치

wordcloud 설치

pip install wordcloud
만약 에러가 발생하면

```
Anaconda Powershell Prompt (Anaconda3)
(base) PS C:\Users\#노은희> pip install wordcloud
Collecting wordcloud
  Using cached wordcloud-1.8.1.tar.gz (220 kB)
Requirement already satisfied: numpy>=1.6.1 in c:\programdata\anaconda3\lib\site-packages (from wordcloud) (1.20.3)
Requirement already satisfied: pillow in c:\programdata\anaconda3\lib\site-packages (from wordcloud) (8.4.0)
Requirement already satisfied: matplotlib in c:\programdata\anaconda3\lib\site-packages (from wordcloud) (3.4.3)
Requirement already satisfied: kiwisolver>=1.0.1 in c:\programdata\anaconda3\lib\site-packages (from matplotlib->wordcloud) (1.3.1)
Requirement already satisfied: pyparsing>=2.2.1 in c:\programdata\anaconda3\lib\site-packages (from matplotlib->wordcloud) (3.0.4)
Requirement already satisfied: cython>=0.10 in c:\programdata\anaconda3\lib\site-packages (from matplotlib->wordcloud) (0.10.0)
Requirement already satisfied: python-dateutil>=2.7 in c:\programdata\anaconda3\lib\site-packages (from matplotlib->wordcloud) (2.8.2)
Requirement already satisfied: six in c:\programdata\anaconda3\lib\site-packages (from cython->matplotlib->wordcloud) (1.16.0)
Building wheels for collected packages: wordcloud
  Building wheel for wordcloud (setup.py) ... error
    ERROR: Command errored out with exit status 1:
      command: 'C:\ProgramData\Anaconda3\python.exe' -u -c 'import io, os, sys, setuptools, tokenize; sys.argv[0] = '"'"'C:\Users\#Public\Documents\#WESTsoft\CreatorTemp\pip-install-pq66x63f\wordcloud_9138f41a258c4e489f7690e221c8267c\setup.py'"'"'; __file__='"'"'C:\Users\#Public\Documents\#WESTsoft\CreatorTemp\pip-install-pq66x63f\wordcloud_9138f41a258c4e489f7690e221c8267c\setup.py'"'"';f = getattr(tokenize, '"'"'open'"'"', open)(__file__) if os.path.exists(__file__) else io.StringIO('"'"'from setuptools import setup; setup()'"'"');code = f.read().replace('"'"'\r\n'"'"', '"'"'\n'"'"');f.close();exec(compile(code, __file__, '"'"'exec'"'"'))' bdist_wheel -d 'C:\Users\#Public\Documents\#WESTsoft\CreatorTemp\pip-wheel-3fd113_5'
     cwd: C:\Users\#Public\Documents\#WESTsoft\CreatorTemp\pip-install-pq66x63f\wordcloud_9138f41a258c4e489f7690e221c8267c\
Complete output (20 lines):
running bdist_wheel
running build
running build_py
creating build
creating build\lib.win-amd64-3.9
creating build\lib.win-amd64-3.9\wordcloud
copying wordcloud\color_from_image.py -> build\lib.win-amd64-3.9\wordcloud
copying wordcloud\tokenization.py -> build\lib.win-amd64-3.9\wordcloud
```

아래 링크로 들어가서 wordcloud whl 파일을 설치된 파이썬 버전 확인 후 다운받기

<https://www.lfd.uci.edu/~gohlke/pythonlibs/#wordcloud>

Python Extension Packages for \ x +

lfd.uci.edu/~gohlke/pythonlibs/#wordcloud

Wordcloud: a little word cloud generator.

- [wordcloud-1.8.1-pp38-pypy38_pp73-win_amd64.whl](#)
- [wordcloud-1.8.1-pp37-pypy37_pp73-win_amd64.whl](#)
- [wordcloud-1.8.1-cp311-cp311-win_amd64.whl](#)
- [wordcloud-1.8.1-cp310-cp310-win_amd64.whl](#)
- [wordcloud-1.8.1-cp310-cp310-win32.whl](#)
- [wordcloud-1.8.1-cp39-cp39-win_amd64.whl](#)
- [wordcloud-1.8.1-cp39-cp39-win32.whl](#)
- [wordcloud-1.8.1-cp38-cp38-win_amd64.whl](#)
- [wordcloud-1.8.1-cp38-cp38-win32.whl](#)
- [wordcloud-1.8.1-cp37-cp37m-win_amd64.whl](#)
- [wordcloud-1.8.1-cp37-cp37m-win32.whl](#)
- [wordcloud-1.8.1-cp36-cp36m-win_amd64.whl](#)
- [wordcloud-1.8.1-cp36-cp36m-win32.whl](#)
- [wordcloud-1.6.0-cp35-cp35m-win_amd64.whl](#)

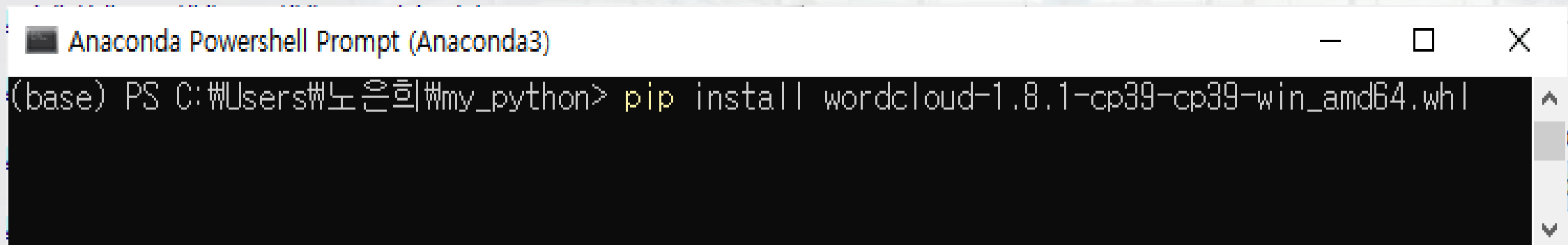
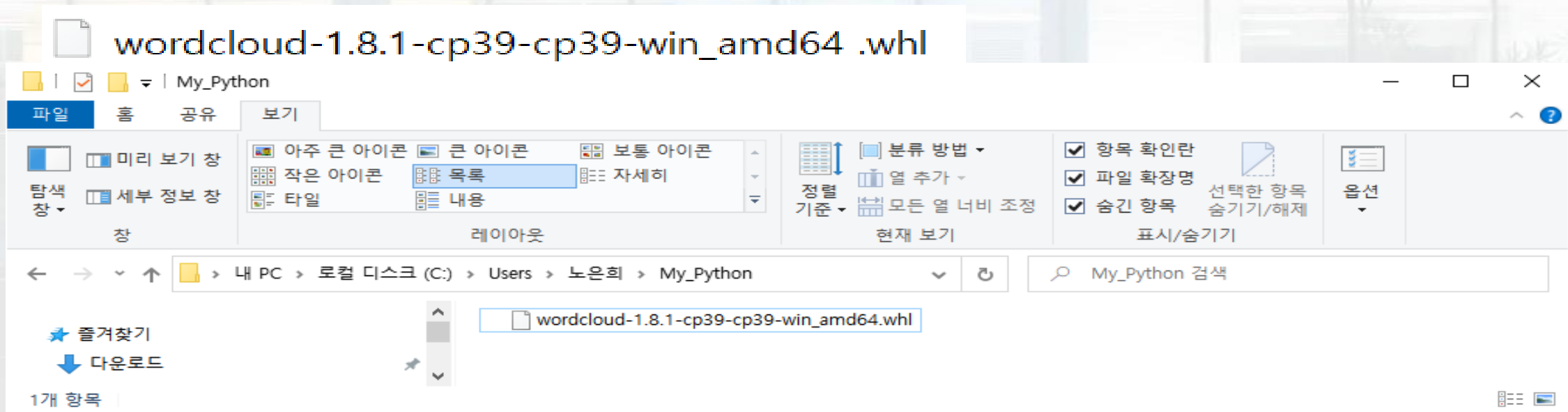
Anaconda Powershell Prompt (Anaconda3)

```
(base) PS C:\Users\#노은희> python --version
Python 3.9.7
(base) PS C:\Users\#노은희>
```

버전 확인
Python --version

wordcloud 설치

다운받은 폴더에서(whl파일이 있는 경로) cmd 창에 'pip install 파일명'을 해주면 된다.
pip install wordcloud-1.8.1-cp39-cp39-win_amd64.whl



wordcloud 설치 확인하기

```
선택 Anaconda Powershell Prompt (Anaconda3)
(base) PS C:\Users\노은희> pip list
Package Version
-----
alabaster 0.7.12
anaconda-client 1.9.0
anaconda-navigator 2.1.2
anaconda-project 0.10.1
anyio 2.2.0
appdirs 1.4.4
argh 0.26.2
argon2-cffi 20.1.0
arrow 0.13.1
asn1crypto 1.4.0
```

```
Anaconda Powershell Prompt (Anaconda3)
win-inet-pton 1.1.0
win-unicode-console 0.5
wincertstore 0.2
wordcloud 1.8.1
wrapt 1.12.1
wsproto 1.1.0
xlrd 2.0.1
XlsxWriter 3.0.1
xlwings 0.24.9
xlwt 1.3.0
xmltodict 0.12.0
yapf 0.31.0
zict 2.0.0
```

