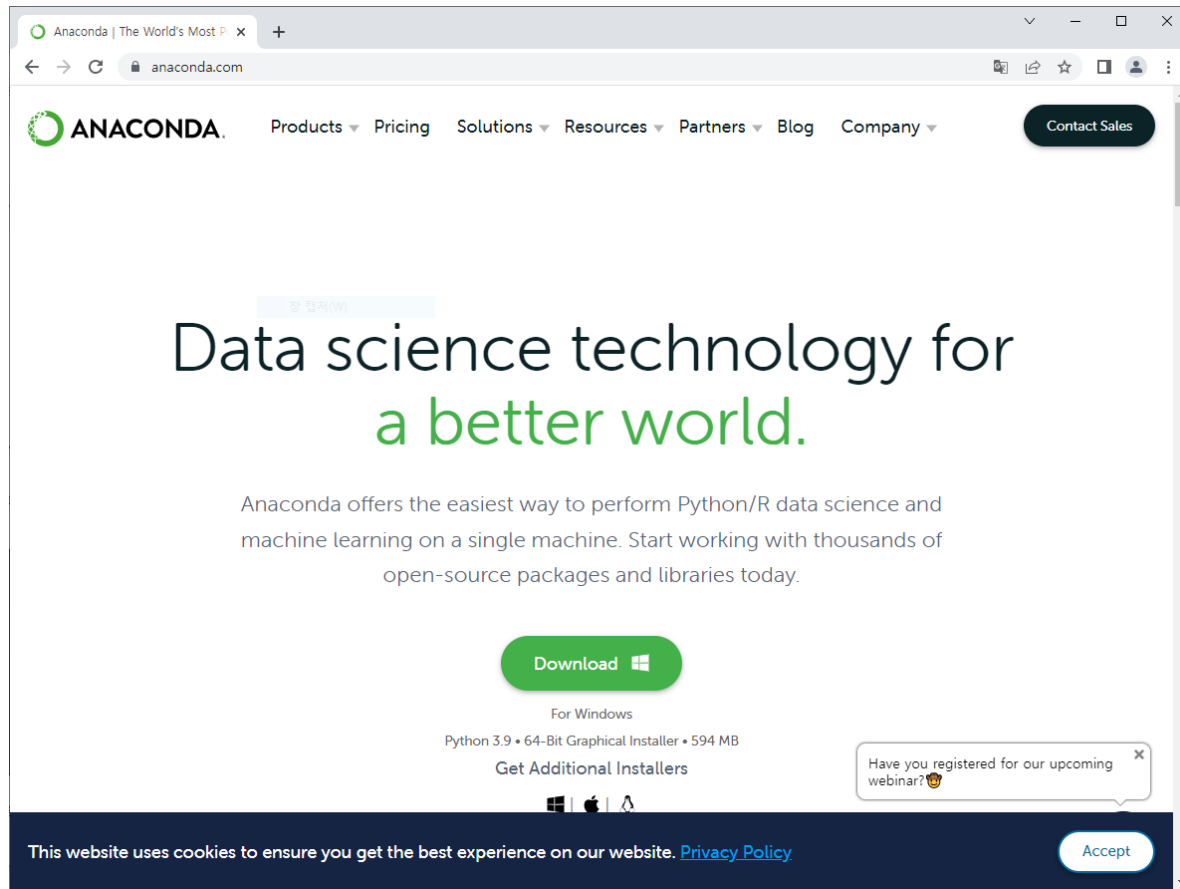


# Anaconda 사이트 접속



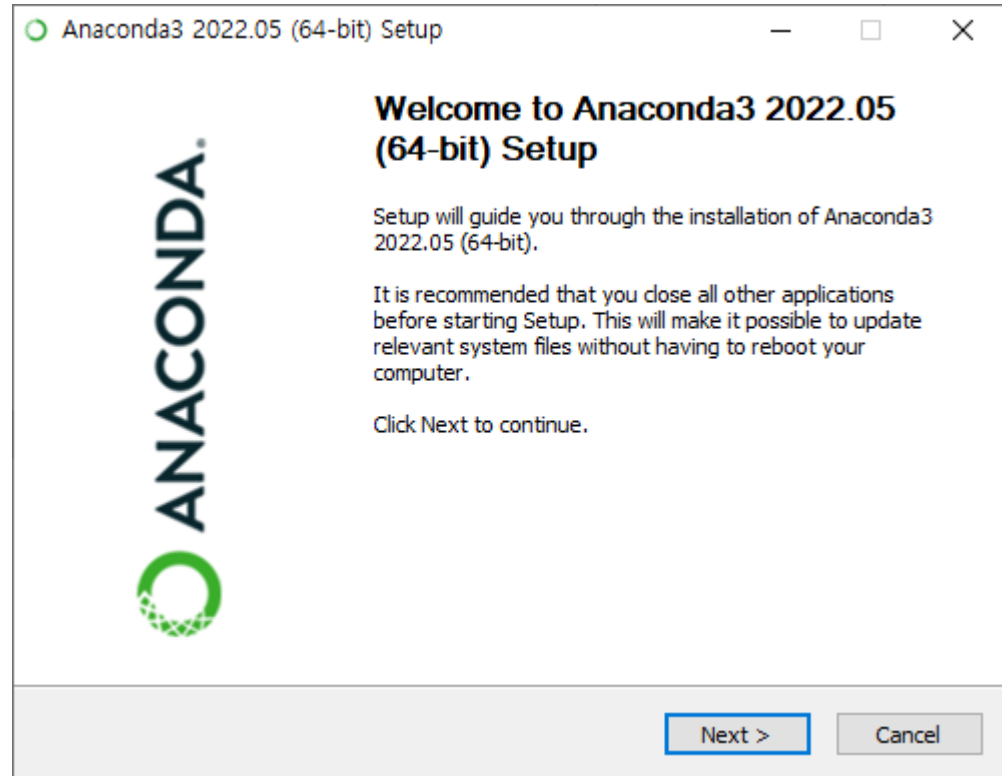
> anaconda.com

# Anaconda 다운로드



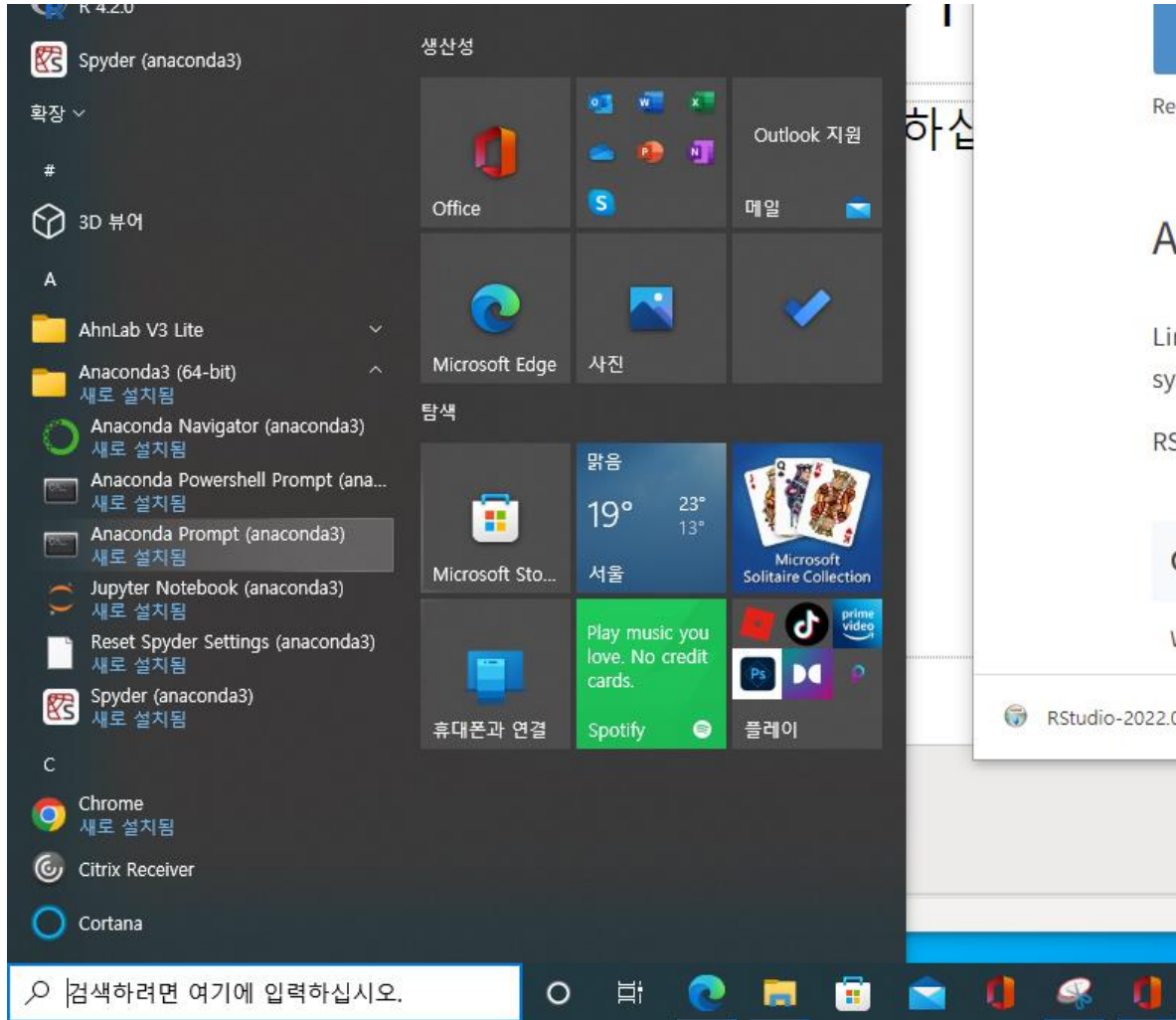
> Anaconda3...

# Anaconda 설치

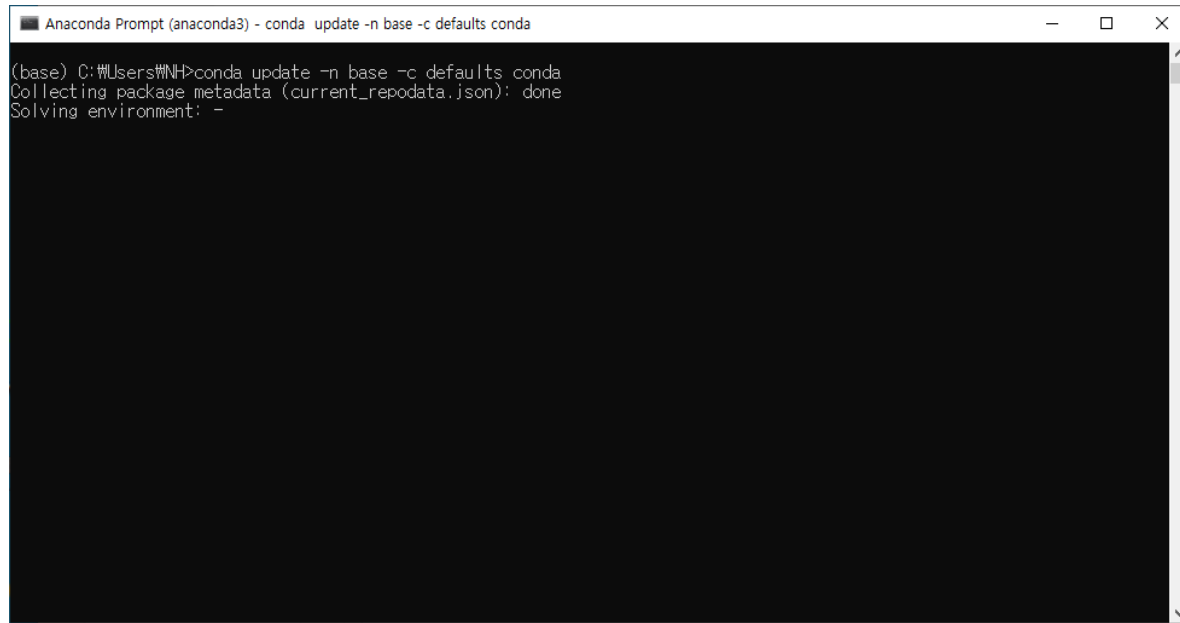


> 계속 진행

# Anaconda Prompt 실행



# Conda version update

A screenshot of the Anaconda Prompt terminal window. The title bar reads "Anaconda Prompt (anaconda3) - conda update -n base -c defaults conda". The terminal shows the command `(base) C:\Users\WNNH>conda update -n base -c defaults conda` being executed. Below the command, the output shows "Collecting package metadata (current\_repodata.json): done" and "Solving environment: -".

```
Anaconda Prompt (anaconda3) - conda update -n base -c defaults conda
(base) C:\Users\WNNH>conda update -n base -c defaults conda
Collecting package metadata (current_repodata.json): done
Solving environment: -
```

> `conda update -n base -c defaults conda`

# R에서 python 환경 설정

The screenshot shows the RStudio interface with the following components:

- Source Editor:** Contains the following R code:

```
1 install.packages("reticulate")
2 library(reticulate)
3 conda_create("tensorflow2")
4 use_condaenv(condaenv = "tensorflow2", required = TRUE)
5 py_config()
6
```
- Environment Panel:** Shows "Global Environment" with 235 MIB of memory used. The environment is currently empty.
- Files Panel:** Displays the file explorer for the Home directory, showing files like .Rhistory, %eKigFx.jpg, desktop.ini, My Music, My Pictures, My Videos, and Python Scripts.
- Console/Terminal:** Shows the output of the R commands:

```
R 4.2.0 ~\...
conda-forge/noarch::wheels-0.3.1-py38_0
conda-forge/win-64::xz-5.2.5-h62dc97_1

Preparing transaction: ...working... done
Verifying transaction: ...working... done
Executing transaction: ...working... done
[1] "C:\\Users\\NH\\anaconda3\\envs\\tensorflow2\\python.exe"
> use_condaenv(condaenv = "tensorflow2", required = TRUE)
> py_config()
python:      C:/Users/NH/anaconda3/envs/tensorflow2/python.exe
libpython:   C:/Users/NH/anaconda3/envs/tensorflow2/python38.dll
pythonhome:  C:/Users/NH/anaconda3/envs/tensorflow2
version:     3.8.13 | packaged by conda-forge | (default, Mar 25 2022, 0
5:59:00) [MSC v.1929 64 bit (AMD64)]
Architecture: 64bit
numpy:       [NOT FOUND]

NOTE: python version was forced by use_python function
>
```

- > `install.packages("reticulate")`
- > `library(reticulate)`
- > `conda_create("tensorflow2")`
- > `use_condaenv(condaenv = "tensorflow2", required = TRUE)`
- > `py_config()`

# conda에 tensorflow 설치

The screenshot displays the RStudio IDE interface. The top menu bar includes File, Edit, Code, View, Plots, Session, Build, Debug, Profile, Tools, and Help. The top toolbar contains icons for file operations and a 'Go to file/function' search bar. The main editor window shows a script named 'Untitled1\*' with the following R code:

```
1 install.packages("reticulate")
2 library(reticulate)
3 conda_create("tensorflow2")
4 use_condaenv(condaenv = "tensorflow2", required = TRUE)
5 py_config()
6
7 conda_install("tensorflow2", "scipy")
8 conda_install("tensorflow2",
9               packages = c("numpy", "pandas",
10                           "scikit-learn", "tensorflow"))
11
```

The bottom-left pane shows the 'Console' output, displaying the progress of package installation for various dependencies:

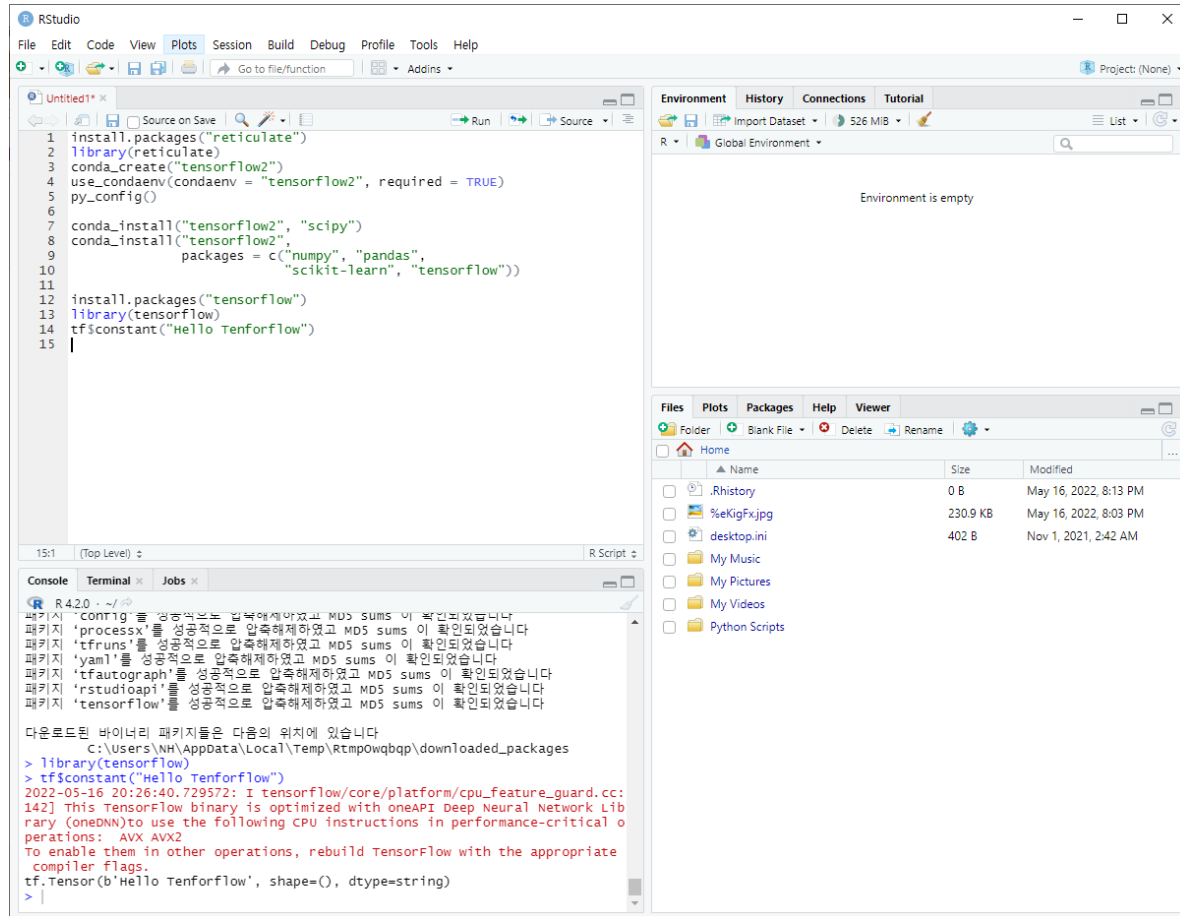
```
R 4.2.0 - ~/...
aiohttp-1.2.0      12 KB      | ##### 100%
pyopenssl-22.0.0  49 KB      | ##### 100%
tensorflow-estimator 289 KB     | ##### 100%
astor-0.8.1       25 KB      | ##### 100%
tensorflow-base-2.3. 49.5 MB     | ##### 100%
pyu2f-0.1.5       31 KB      | ##### 100%
typing-extensions-4. 8 KB        | ##### 100%
protobuf-3.20.1   237 KB     | ##### 100%
zlib-1.2.11       106 KB     | ##### 100%
gast-0.4.0        12 KB      | ##### 100%
win_inet_pton-1.1.0 9 KB        | ##### 100%
colorama-0.4.4    18 KB      | ##### 100%
libprotobuf-3.20.1 2.4 MB     | ##### 100%
async-timeout-4.0.2 9 KB        | ##### 100%
requests-oauthlib-1. 22 KB      | ##### 100%
werkzeug-2.1.2    237 KB     | ##### 100%
Preparing transaction: ...working... done
Verifying transaction: ...working... done
Executing transaction: ...working... done
>
```

The bottom-right pane shows the 'Environment' tab, indicating that the environment is empty. The 'Files' pane below it lists the contents of the 'Home' directory:

Name	Size	Modified
.Rhistory	0 B	May 16, 2022, 8:13 PM
%KigFxp.jpg	230.9 KB	May 16, 2022, 8:03 PM
desktop.ini	402 B	Nov 1, 2021, 2:42 AM
My Music		
My Pictures		
My Videos		
Python Scripts		

```
> conda_install("tensorflow2", "scipy")
> conda_install("tensorflow2",
>               packages = c("numpy", "pandas",
>                             "scikit-learn",
>                             "tensorflow"))
> conda_install("tensorflow2", "keras")
```

# R에 tensorflow 설치



The screenshot shows the RStudio interface with a script editor on the left containing R code for installing TensorFlow. The console at the bottom shows the output of the code, including package installation progress and a warning about the TensorFlow binary being optimized for specific CPU instructions.

```
1 install.packages("reticulate")
2 library(reticulate)
3 conda_create("tensorflow2")
4 use_condaenv(condaenv = "tensorflow2", required = TRUE)
5 py_config()
6
7 conda_install("tensorflow2", "scipy")
8 conda_install("tensorflow2",
9               packages = c("numpy", "pandas",
10                            "scikit-learn", "tensorflow"))
11
12 install.packages("tensorflow")
13 library(tensorflow)
14 tf$constant("Hello Tenforflow")
15
```

Console output:

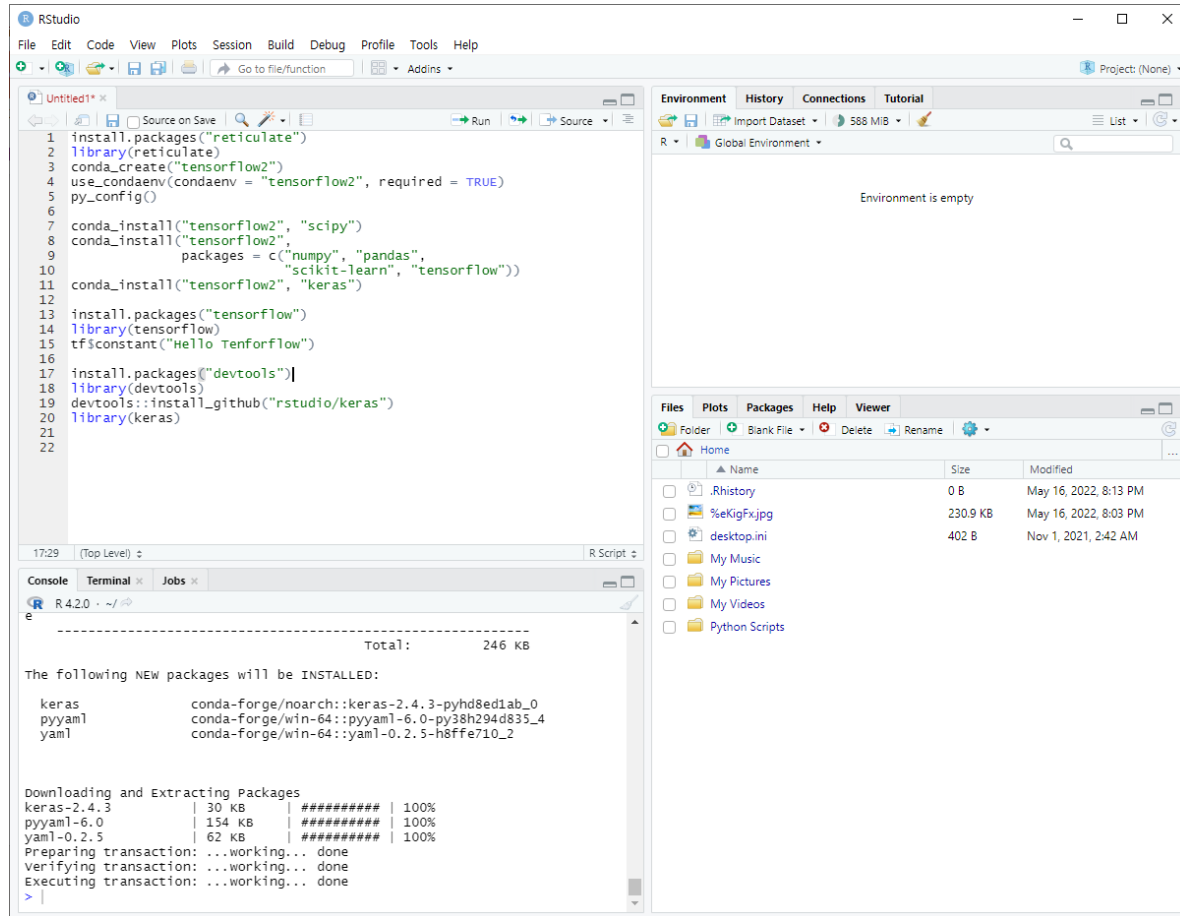
```
R 4.2.0 ~ / ~
패키지 'conrtig'를 성공적으로 압축해제하였고 MD5 sums 이 확인되었습니다
패키지 'processx'를 성공적으로 압축해제하였고 MD5 sums 이 확인되었습니다
패키지 'tfruns'를 성공적으로 압축해제하였고 MD5 sums 이 확인되었습니다
패키지 'yaml'를 성공적으로 압축해제하였고 MD5 sums 이 확인되었습니다
패키지 'tfautograph'를 성공적으로 압축해제하였고 MD5 sums 이 확인되었습니다
패키지 'rstudioapi'를 성공적으로 압축해제하였고 MD5 sums 이 확인되었습니다
패키지 'tensorflow'를 성공적으로 압축해제하였고 MD5 sums 이 확인되었습니다

다운로드된 바이너리 패키지들은 다음의 위치에 있습니다
C:\Users\NH\AppData\Local\Temp\Rtmpowqbpq\downloaded_packages
> library(tensorflow)
> tf$constant("Hello Tenforflow")
2022-05-16 20:26:40.729572: I tensorflow/core/platform/cpu_feature_guard.cc:142] This TensorFlow binary is optimized with oneAPI Deep Neural Network Library (oneDNN) to use the following CPU instructions in performance-critical operations: AVX AVX2
To enable them in other operations, rebuild TensorFlow with the appropriate compiler flags.
tf.Tensor(b'Hello Tenforflow', shape=(), dtype=string)
>
```

- `install.packages("tensorflow")`
- `library(tensorflow)`
- `tf$constant("Hello Tenforflow")`



# R에 keras 설치



```
1 install.packages("reticulate")
2 library(reticulate)
3 conda_create("tensorflow2")
4 use_condaenv(condaenv = "tensorflow2", required = TRUE)
5 py_config()
6
7 conda_install("tensorflow2", "scipy")
8 conda_install("tensorflow2",
9               packages = c("numpy", "pandas",
10                            "scikit-learn", "tensorflow"))
11 conda_install("tensorflow2", "keras")
12
13 install.packages("tensorflow")
14 library(tensorflow)
15 tf$constant("Hello Tensorflow")
16
17 install.packages("devtools")
18 library(devtools)
19 devtools::install_github("rstudio/keras")
20 library(keras)
21
22
```

Console Output:

```
R 4.2.0 ~ /
>
----- Total: 246 KB
The following NEW packages will be INSTALLED:

 keras      conda-forge/noarch::keras-2.4.3-pyhd8ed1ab_0
 pyyaml     conda-forge/win-64::pyyaml-6.0-py38h294d835_4
 yaml       conda-forge/win-64::yaml-0.2.5-h8ffe710_2

Downloading and Extracting Packages
keras-2.4.3      | 30 KB      | ##### | 100%
pyyaml-6.0      | 154 KB     | ##### | 100%
yaml-0.2.5      | 62 KB      | ##### | 100%
Preparing transaction: ...working... done
Verifying transaction: ...working... done
Executing transaction: ...working... done
> |
```

- `install.packages("devtools")`
- `library(devtools)`
- `devtools::install_github("rstudio/keras")`
- `library(keras)`