

به نام خدا

مهتاب محمدی 3961231101

نصب تنسرفلو و کراس :

```
C:\Users\noor>pip3 install --upgrade tensorflow
Defaulting to user installation because normal site-packages is not writeable
Collecting tensorflow
  Downloading tensorflow-2.5.0rc3-cp39-cp39-win_amd64.whl (422.6 MB)
    | 422.6 MB 14 kB/s
Collecting tensorboard~=2.5
  Downloading tensorboard-2.5.0-py3-none-any.whl (6.0 MB)
    | 6.0 MB 3.3 MB/s
Collecting flatbuffers~=1.12.0
  Downloading flatbuffers-1.12-py2.py3-none-any.whl (15 kB)
Collecting protobuf>=3.9.2
  Downloading protobuf-3.16.0-py2.py3-none-any.whl (173 kB)
    | 173 kB 2.2 MB/s
Collecting absl-py~=0.10
  Downloading absl_py-0.12.0-py3-none-any.whl (129 kB)
    | 129 kB 6.4 MB/s
Collecting grpcio~=1.34.0
  Downloading grpcio-1.34.1-cp39-cp39-win_amd64.whl (2.9 MB)
    | 2.9 MB 2.2 MB/s
Collecting keras-preprocessing~=1.1.2
  Downloading Keras_Preprocessing-1.1.2-py2.py3-none-any.whl (42 kB)
    | 42 kB 441 kB/s
Collecting tensorflow-estimator<2.6.0,>=2.5.0rc0
  Downloading tensorflow_estimator-2.5.0rc0-py2.py3-none-any.whl (462 kB)
    | 462 kB 2.2 MB/s
Requirement already satisfied: wheel~=0.35 in c:\users\noor\appdata\roaming\python\
(0.36.2)
```

```
Collecting six~=1.15.0
  Downloading six-1.15.0-py2.py3-none-any.whl (10 kB)
Collecting numpy~=1.19.2
  Downloading numpy-1.19.5-cp39-cp39-win_amd64.whl (13.3 MB)
  | 13.3 MB 2.2 MB/s
Collecting keras-nightly~=2.5.0.dev
  Downloading keras_nightly-2.5.0.dev2021032900-py2.py3-none-any.whl (1.2 MB)
  | 1.2 MB 1.1 MB/s
Collecting h5py~=3.1.0
  Downloading h5py-3.1.0-cp39-cp39-win_amd64.whl (2.7 MB)
  | 2.7 MB 1.3 MB/s
Collecting google-pasta~=0.2
  Downloading google_pasta-0.2.0-py3-none-any.whl (57 kB)
  | 57 kB 752 kB/s
Collecting astunparse~=1.6.3
  Downloading astunparse-1.6.3-py2.py3-none-any.whl (12 kB)
Collecting wrapt~=1.12.1
  Downloading wrapt-1.12.1.tar.gz (27 kB)
Collecting opt-einsum~=3.3.0
  Downloading opt_einsum-3.3.0-py3-none-any.whl (65 kB)
  | 65 kB 431 kB/s
Collecting termcolor~=1.1.0
  Downloading termcolor-1.1.0.tar.gz (3.9 kB)
Collecting gast==0.4.0
  Downloading gast-0.4.0-py3-none-any.whl (9.8 kB)
Collecting typing-extensions~=3.7.4
  Downloading typing_extensions-3.7.4.3-py3-none-any.whl (22 kB)
Collecting requests<3,>=2.21.0
  Downloading requests-2.25.1-py2.py3-none-any.whl (61 kB)
  | 61 kB 777 kB/s
```

```
Requirement already satisfied: setuptools>=41.0.0 in c:\program files\python39\lib\site-packages (56.0.0)
```

```
Collecting tensorboard-data-server<0.7.0,>=0.6.0
  Downloading tensorboard_data_server-0.6.1-py3-none-any.whl (2.4 kB)
Collecting google-auth<2,>=1.6.3
  Downloading google_auth-1.30.0-py2.py3-none-any.whl (146 kB)
  | 146 kB 1.1 MB/s
Collecting markdown>=2.6.8
  Downloading Markdown-3.3.4-py3-none-any.whl (97 kB)
  | 97 kB 1.1 MB/s
Collecting google-auth-oauthlib<0.5,>=0.4.1
  Downloading google_auth_oauthlib-0.4.4-py2.py3-none-any.whl (18 kB)
Collecting tensorboard-plugin-wit>=1.6.0
  Downloading tensorboard_plugin_wit-1.8.0-py3-none-any.whl (781 kB)
  | 781 kB 3.3 MB/s
Collecting werkzeug>=0.11.15
  Downloading Werkzeug-1.0.1-py2.py3-none-any.whl (298 kB)
  | 298 kB 2.2 MB/s
Collecting cachetools<5.0,>=2.0.0
  Downloading cachetools-4.2.2-py3-none-any.whl (11 kB)
Collecting pyasn1-modules>=0.2.1
  Downloading pyasn1_modules-0.2.8-py2.py3-none-any.whl (155 kB)
  | 155 kB 2.2 MB/s
Collecting rsa<5,>=3.1.4
  Downloading rsa-4.7.2-py3-none-any.whl (34 kB)
Collecting requests-oauthlib>=0.7.0
  Downloading requests_oauthlib-1.3.0-py2.py3-none-any.whl (23 kB)
Collecting pyasn1<0.5.0,>=0.4.6
  Downloading pyasn1-0.4.8-py2.py3-none-any.whl (77 kB)
  | 77 kB 345 kB/s
```

```
Collecting urllib3<1.27,>=1.21.1
  Downloading urllib3-1.26.4-py2.py3-none-any.whl (153 kB)
    |████████████████████| 153 kB 1.7 MB/s
Collecting certifi>=2017.4.17
  Downloading certifi-2020.12.5-py2.py3-none-any.whl (147 kB)
    |████████████████████| 147 kB 1.1 MB/s
Collecting chardet<5,>=3.0.2
  Downloading chardet-4.0.0-py2.py3-none-any.whl (178 kB)
    |████████████████████| 178 kB 1.3 MB/s
Collecting idna<3,>=2.5
  Downloading idna-2.10-py2.py3-none-any.whl (58 kB)
    |████████████████████| 58 kB 651 kB/s
Collecting oauthlib>=3.0.0
  Downloading oauthlib-3.1.0-py2.py3-none-any.whl (147 kB)
    |████████████████████| 147 kB 2.2 MB/s
Building wheels for collected packages: termcolor, wrapt
  Building wheel for termcolor (setup.py) ... done
  Created wheel for termcolor: filename=termcolor-1.1.0-py3-none-any.whl size=4829 sha256=63e565cc1b9e631fc5365c5a39390
626832c8178b4cb7cda10b311bb517558f
  Stored in directory: c:\users\noor\appdata\local\pip\cache\wheels\b6\0d\90\0d1bbd99855f99cb2f6c2e5ff96f8023fad8ec3676
f7d72d
  Building wheel for wrapt (setup.py) ... done
  Created wheel for wrapt: filename=wrapt-1.12.1-py3-none-any.whl size=19553 sha256=a5693a05a9f0c0d5f03991b4764dec49468
c76d3039c9a2570c373498e6ee5
  Stored in directory: c:\users\noor\appdata\local\pip\cache\wheels\98\23\68\efe259aaca055e93b08e74fbe512819c69a2155c11
3c0f10
Successfully built termcolor wrapt
Installing collected packages: urllib3, pyasn1, idna, chardet, certifi, six, rsa, requests, pyasn1-modules, oauthlib, c
thetools, requests-oauthlib, google-auth, werkzeug, tensorboard-plugin-wit, tensorboard-data-server, protobuf, numpy, m
kdown, grpcio, google-auth-oauthlib, absl-py, wrapt, typing-extensions, termcolor, tensorflow-estimator, tensorboard,
```

> was unexpected at this time.

C:\Users\noor>pip install numpy scipy

Defaulting to user installation because normal site-packages is not writeable

Requirement already satisfied: numpy in c:\users\noor\appdata\roaming\python\python39\site-packages (1.19.5)

Collecting scipy

Downloading scipy-1.6.3-cp39-cp39-win_amd64.whl (32.7 MB)

| 32.7 MB 49 kB/s

Installing collected packages: scipy

Successfully installed scipy-1.6.3

C:\Users\noor>pip install scikit-learn

Defaulting to user installation because normal site-packages is not writeable

Collecting scikit-learn

Downloading scikit_learn-0.24.2-cp39-cp39-win_amd64.whl (6.9 MB)

| 6.9 MB 3.2 MB/s

Requirement already satisfied: numpy>=1.13.3 in c:\users\noor\appdata\roaming\python\python39\site-packages (from scikit-learn) (1.19.5)

Requirement already satisfied: scipy>=0.19.1 in c:\users\noor\appdata\roaming\python\python39\site-packages (from scikit-learn) (1.6.3)

Collecting joblib>=0.11

Downloading joblib-1.0.1-py3-none-any.whl (303 kB)

| 303 kB 3.3 MB/s

Collecting threadpoolctl>=2.0.0

Downloading threadpoolctl-2.1.0-py3-none-any.whl (12 kB)

Installing collected packages: threadpoolctl, joblib, scikit-learn

Successfully installed joblib-1.0.1 scikit-learn-0.24.2 threadpoolctl-2.1.0

C:\Users\noor>pip install pillow

Defaulting to user installation because normal site-packages is not writeable

C:\Users\noor>pip install keras

Defaulting to user installation because normal site-packages is not writeable

Collecting keras

Downloading Keras-2.4.3-py2.py3-none-any.whl (36 kB)

Requirement already satisfied: scipy>=0.14 in c:\users\noor\appdata\roaming\python\python39\site-packages (from keras) (1.6.3)

Requirement already satisfied: h5py in c:\users\noor\appdata\roaming\python\python39\site-packages (from keras) (3.1.0)

Requirement already satisfied: numpy>=1.9.1 in c:\users\noor\appdata\roaming\python\python39\site-packages (from keras) (1.19.5)

Collecting pyyaml

Downloading PyYAML-5.4.1-cp39-cp39-win_amd64.whl (213 kB)

| 213 kB 819 kB/s

Installing collected packages: pyyaml, keras

Successfully installed keras-2.4.3 pyyaml-5.4.1