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```
[ ] ⏎ !pip install tensorflow==2.16.1

Collecting tensorflow==2.16.1
  Downloading tensorflow-2.16.1-cp312-cp312-manylinux_2_17_x86_64.manylinux2014_x86_64.whl.metadata (4.3 kB)
Requirement already satisfied: absl-py>=1.0.0 in /usr/local/lib/python3.12/dist-packages (from tensorflow==2.16.1) (1.4.0)
Requirement already satisfied: astunparse>=1.6.0 in /usr/local/lib/python3.12/dist-packages (from tensorflow==2.16.1) (1.6.3)
Requirement already satisfied: flatbuffers>=23.5.26 in /usr/local/lib/python3.12/dist-packages (from tensorflow==2.16.1) (25.9.23)
Requirement already satisfied: gast!=0.5.0,!>0.5.1,!>0.5.2,>=0.2.1 in /usr/local/lib/python3.12/dist-packages (from tensorflow==2.16.1) (0.6.0)
Requirement already satisfied: google-pasta>=0.1.1 in /usr/local/lib/python3.12/dist-packages (from tensorflow==2.16.1) (0.2.0)
Requirement already satisfied: h5py>=3.10.0 in /usr/local/lib/python3.12/dist-packages (from tensorflow==2.16.1) (3.14.0)
Requirement already satisfied: libclang>=13.0.0 in /usr/local/lib/python3.12/dist-packages (from tensorflow==2.16.1) (18.1.1)
Collecting ml-dtypes<=0.3.1 (from tensorflow==2.16.1)
  Downloading ml_dtypes-0.3.2-cp312-cp312-manylinux_2_17_x86_64.manylinux2014_x86_64.whl.metadata (20 kB)
Requirement already satisfied: opt-einsum>=2.3.2 in /usr/local/lib/python3.12/dist-packages (from tensorflow==2.16.1) (3.4.0)
Requirement already satisfied: packaging in /usr/local/lib/python3.12/dist-packages (from tensorflow==2.16.1) (25.0)
Collecting protobuf!=4.21.0,!>4.21.1,!>4.21.2,!>4.21.3,!>4.21.4,!>4.21.5,<=0.0dev,>=3.20.3 (from tensorflow==2.16.1)
  Downloading protobuf-4.25.8-cp37abi3-manylinux2014_x86_64.whl.metadata (541 bytes)
Requirement already satisfied: requests<3,>=2.21.0 in /usr/local/lib/python3.12/dist-packages (from tensorflow==2.16.1) (2.32.4)
Requirement already satisfied: setuptools in /usr/local/lib/python3.12/dist-packages (from tensorflow==2.16.1) (75.2.0)
Requirement already satisfied: six>=1.12.0 in /usr/local/lib/python3.12/dist-packages (from tensorflow==2.16.1) (1.17.0)
Requirement already satisfied: termcolor>=1.1.0 in /usr/local/lib/python3.12/dist-packages (from tensorflow==2.16.1) (3.1.0)
Requirement already satisfied: typing-extensions>=3.6.6 in /usr/local/lib/python3.12/dist-packages (from tensorflow==2.16.1) (4.15.0)
Requirement already satisfied: wrapt>=1.11.0 in /usr/local/lib/python3.12/dist-packages (from tensorflow==2.16.1) (1.17.3)
Requirement already satisfied: grpcio<2.0,>=1.24.3 in /usr/local/lib/python3.12/dist-packages (from tensorflow==2.16.1) (1.75.1)
Collecting tensorboard<2.17,>=2.16 (from tensorflow==2.16.1)
  Downloading tensorboard-2.16.2-py3-none-any.whl.metadata (1.6 kB)
Collecting keras>=3.0.0 (from tensorflow==2.16.1)
  Downloading keras-3.11.3-py3-none-any.whl.metadata (5.9 kB)
Collecting numpy<2.0.0,>=1.26.0 (from tensorflow==2.16.1)
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[ ] ⏎ Requirement already satisfied: pygments<3.0.0,>=2.13.0 in /usr/local/lib/python3.12/dist-packages (from rich->keras>=3.0.0->tensorflow==2.16.1) (2.19.2)
Requirement already satisfied: mdurl~>0.1 in /usr/local/lib/python3.12/dist-packages (from markdown-it-py>=2.2.0->rich->keras>=3.0.0->tensorflow==2.16.1)
  Downloading tensorflow-2.16.1-cp312-cp312-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (589.9 MB) 589.9/589.9 MB 1.8 MB/s eta 0:00:00
  Downloading keras-3.11.3-py3-none-any.whl (1.4 MB) 1.4/1.4 MB 64.7 MB/s eta 0:00:00
  Downloading ml_dtypes-0.3.2-cp312-cp312-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (2.2 MB) 2.2/2.2 MB 46.0 MB/s eta 0:00:00
  Downloading numpy-1.26.4-cp312-cp312-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (18.0 MB) 18.0/18.0 MB 87.1 MB/s eta 0:00:00
  Downloading protobuf-4.25.8-cp37abi3-manylinux2014_x86_64.whl (294 kB) 294.9/294.9 kB 15.2 MB/s eta 0:00:00
  Downloading tensorboard-2.16.2-py3-none-any.whl (5.5 MB) 5.5/5.5 MB 93.3 MB/s eta 0:00:00
  Installing collected packages: protobuf, numpy, tensorboard, ml-dtypes, keras, tensorflow
    Attempting uninstall: protobuf
      Found existing installation: protobuf 5.29.5
      Uninstalling protobuf-5.29.5:
        Successfully uninstalled protobuf-5.29.5
    Attempting uninstall: numpy
      Found existing installation: numpy 2.0.2
      Uninstalling numpy-2.0.2:
        Successfully uninstalled numpy-2.0.2
    Attempting uninstall: tensorboard
      Found existing installation: tensorboard 2.19.0
      Uninstalling tensorboard-2.19.0:
        Successfully uninstalled tensorboard-2.19.0
    Attempting uninstall: ml-dtypes
      Found existing installation: ml_dtypes 0.5.3
      Uninstalling ml_dtypes-0.5.3:
        Successfully uninstalled ml_dtypes-0.5.3
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[ ] ⏪ !pip install torch torchvision torchaudio

⠄ Collecting torch
    Downloading torch-2.8.0-cp312-cp312-manylinux_2_28_x86_64.whl.metadata (30 kB)
⠄ Collecting torchvision
    Downloading torchvision-0.23.0-cp312-cp312-manylinux_2_28_x86_64.whl.metadata (6.1 kB)
⠄ Collecting torchaudio
    Downloading torchaudio-2.8.0-cp312-cp312-manylinux_2_28_x86_64.whl.metadata (7.2 kB)
Requirement already satisfied: filelock in /usr/local/lib/python3.12/dist-packages (from torch) (3.19.1)
Requirement already satisfied: typing-extensions<=4.10.0 in /usr/local/lib/python3.12/dist-packages (from torch) (4.15.0)
Requirement already satisfied: setuptools in /usr/local/lib/python3.12/dist-packages (from torch) (75.2.0)
Requirement already satisfied: sympy>=1.13.3 in /usr/local/lib/python3.12/dist-packages (from torch) (1.13.3)
Requirement already satisfied: networkx in /usr/local/lib/python3.12/dist-packages (from torch) (3.5)
Requirement already satisfied: jinja2 in /usr/local/lib/python3.12/dist-packages (from torch) (3.1.6)
Requirement already satisfied: fsspec in /usr/local/lib/python3.12/dist-packages (from torch) (2025.3.0)
Collecting nvidia-cuda-nvrtc-cu12==12.8.93 (from torch)
    Downloading nvidia_cuda_nvrtc_cu12-12.8.93-py3-none-manylinux2010_x86_64.manylinux_2_12_x86_64.whl.metadata (1.7 kB)
Collecting nvidia-cuda-runtime-cu12==12.8.90 (from torch)
    Downloading nvidia_cuda_runtime_cu12-12.8.90-py3-none-manylinux2014_x86_64.manylinux_2_17_x86_64.whl.metadata (1.7 kB)
Collecting nvidia-cuda-cupti-cu12==12.8.90 (from torch)
    Downloading nvidia_cuda_cupti_cu12-12.8.90-py3-none-manylinux2014_x86_64.manylinux_2_17_x86_64.whl.metadata (1.7 kB)
Requirement already satisfied: nvidia-cudnn-cu12==9.10.2.21 in /usr/local/lib/python3.12/dist-packages (from torch) (9.10.2.21)
Collecting nvidia-cublas-cu12==12.8.4.1 (from torch)
    Downloading nvidia_cublas_cu12-12.8.4.1-py3-none-manylinux_2_27_x86_64.whl.metadata (1.7 kB)
Collecting nvidia-cufft-cu12==11.3.3.83 (from torch)
    Downloading nvidia_cufft_cu12-11.3.3.83-py3-none-manylinux2014_x86_64.manylinux_2_17_x86_64.whl.metadata (1.7 kB)
Collecting nvidia-curand-cu12==10.3.9.90 (from torch)
    Downloading nvidia_curand_cu12-10.3.9.90-py3-none-manylinux_2_27_x86_64.whl.metadata (1.7 kB)
Collecting nvidia-cusolver-cu12==11.7.3.90 (from torch)
    Downloading nvidia_cusolver_cu12-11.7.3.90-py3-none-manylinux_2_27_x86_64.whl.metadata (1.8 kB)
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[ ] !pip install keras==3.3.3
Collecting keras==3.3.3
  Downloading keras-3.3.3-py3-none-any.whl.metadata (5.7 kB)
Requirement already satisfied: absl-py in /usr/local/lib/python3.12/dist-packages (from keras==3.3.3) (1.4.0)
Requirement already satisfied: numpy in /usr/local/lib/python3.12/dist-packages (from keras==3.3.3) (1.26.4)
Requirement already satisfied: rich in /usr/local/lib/python3.12/dist-packages (from keras==3.3.3) (13.9.4)
Requirement already satisfied: namex in /usr/local/lib/python3.12/dist-packages (from keras==3.3.3) (0.1.0)
Requirement already satisfied: h5py in /usr/local/lib/python3.12/dist-packages (from keras==3.3.3) (3.14.0)
Requirement already satisfied: optree in /usr/local/lib/python3.12/dist-packages (from keras==3.3.3) (0.17.0)
Requirement already satisfied: ml-dtypes in /usr/local/lib/python3.12/dist-packages (from keras==3.3.3) (0.3.2)
Requirement already satisfied: typing-extensions>=4.6.0 in /usr/local/lib/python3.12/dist-packages (from optree->keras==3.3.3) (4.15.0)
Requirement already satisfied: markdown-it-py>=2.2.0 in /usr/local/lib/python3.12/dist-packages (from rich->keras==3.3.3) (4.0.0)
Requirement already satisfied: pygments<3.0.0,>=2.13.0 in /usr/local/lib/python3.12/dist-packages (from rich->keras==3.3.3) (2.19.2)
Requirement already satisfied: mdurl=<0.1 in /usr/local/lib/python3.12/dist-packages (from markdown-it-py>=2.2.0->rich->keras==3.3.3) (0.1.2)
  Downloading keras-3.3.3-py3-none-any.whl (1.1 MB)
                                             1.1/1.1 MB 16.8 MB/s eta 0:00:00
Installing collected packages: keras
  Attempting uninstall: keras
    Found existing installation: keras 3.11.3
    Uninstalling keras-3.11.3:
      Successfully uninstalled keras-3.11.3
ERROR: pip's dependency resolver does not currently take into account all the packages that are installed. This behaviour is the source of the following
tensorflow-text 2.19.0 requires tensorflow<2.20,>=2.19.0, but you have tensorflow 2.16.1 which is incompatible.
keras-hub 0.21.1 requires keras>=3.5, but you have keras 3.3.3 which is incompatible.
tensorflow-decision-forests 1.12.0 requires tensorflow==2.19.0, but you have tensorflow 2.16.1 which is incompatible.
tf-keras 2.19.0 requires tensorflow<2.20,>=2.19, but you have tensorflow 2.16.1 which is incompatible.
Successfully installed keras-3.3.3
```