```python
import tensorflow as tf
print(tf.__version__)
```

```
2022-11-01 14:33:15.600992: I tensorflow/core/platform/cpu_feature_guard.cc:193] This TensorFlow binary is opti
mized with oneAPI Deep Neural Network Library (oneDNN) to use the following CPU instructions in performance-cri
tical operations:  AVX2 FMA
To enable them in other operations, rebuild TensorFlow with the appropriate compiler flags.
2022-11-01 14:33:15.841444: E tensorflow/stream_executor/cuda/cuda_blas.cc:2981] Unable to register cuBLAS fact
ory: Attempting to register factory for plugin cuBLAS when one has already been registered
2022-11-01 14:33:16.807738: W tensorflow/stream_executor/platform/default/dso_loader.cc:64] Could not load dyna
mic library 'libnvinfer.so.7'; dlerror: libnvinfer.so.7: cannot open shared object file: No such file or direct
ory
2022-11-01 14:33:16.807884: W tensorflow/stream_executor/platform/default/dso_loader.cc:64] Could not load dyna
mic library 'libnvinfer_plugin.so.7'; dlerror: libnvinfer_plugin.so.7: cannot open shared object file: No such
file or directory
2022-11-01 14:33:16.807897: W tensorflow/compiler/tf2tensorrt/utils/py_utils.cc:38] TF-TRT Warning: Cannot dlop
en some TensorRT libraries. If you would like to use Nvidia GPU with TensorRT, please make sure the missing lib
raries mentioned above are installed properly.
2.10.0
```

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```python
from keras import datasets
(train_images, train_labels), (test_images, test_labels) = datasets.mnist.load_data()
train_images.shape, test_images.shape
```

```
((60000, 28, 28), (10000, 28, 28))
```

```python
import theano as T
from theano.tensor import function

import numpy as np

x = T.dscalar('x')
y = T.dscalar('y')
z=x+y
f = function([x, y], z)
f(5, 7)
```

```
---------------------------------------------------------------------------
NoSectionError                            Traceback (most recent call last)
File /usr/local/lib/python3.10/dist-packages/theano/configparser.py:168, in fetch_val_for_key(key, delete_key)
    167 try:
--> 168     return theano_cfg.get(section, option)
    169 except ConfigParser.InterpolationError:

File /usr/lib/python3.10/configparser.py:782, in RawConfigParser.get(self, section, option, raw, vars, fallback
)
    781 try:
--> 782     d = self._unify_values(section, vars)
    783 except NoSectionError:

File /usr/lib/python3.10/configparser.py:1153, in RawConfigParser._unify_values(self, section, vars)
   1152     if section != self.default_section:
-> 1153         raise NoSectionError(section) from None
   1154 # Update with the entry specific variables

NoSectionError: No section: 'blas'

During handling of the above exception, another exception occurred:

KeyError                                  Traceback (most recent call last)
File /usr/local/lib/python3.10/dist-packages/theano/configparser.py:327, in ConfigParam.__get__(self, cls, type
_, delete_key)
    326 try:
--> 327     val_str = fetch_val_for_key(self.fullname,
    328                                 delete_key=delete_key)
    329     self.is_default = False

File /usr/local/lib/python3.10/dist-packages/theano/configparser.py:172, in fetch_val_for_key(key, delete_key)
    171 except (ConfigParser.NoOptionError, ConfigParser.NoSectionError):
--> 172     raise KeyError(key)

KeyError: 'blas.ldflags'
```

```
During handling of the above exception, another exception occurred:

AttributeError                          Traceback (most recent call last)
Cell In [6], line 1
----> 1 import theano as T
      2 from theano.tensor import function
      4 import numpy as np

File /usr/local/lib/python3.10/dist-packages/theano/__init__.py:124
    120 from theano.misc.safe_asarray import _asarray
    122 from theano.printing import pprint, pp
--> 124 from theano.scan_module import (scan, map, reduce, foldl, foldr, clone,
    125                                 scan_checkpoints)
    127 from theano.updates import OrderedUpdates
    129 # scan_module import above initializes tensor and scalar making these imports
    130 # redundant
    131
   (...)
    136
    137 # import sparse

File /usr/local/lib/python3.10/dist-packages/theano/scan_module/__init__.py:41
     38 __copyright__ = "(c) 2010, Universite de Montreal"
     39 __contact__ = "Razvan Pascanu <r.pascanu@gmail>"
---> 41 from theano.scan_module import scan_opt
     42 from theano.scan_module.scan import scan
     43 from theano.scan_module.scan_checkpoints import scan_checkpoints

File /usr/local/lib/python3.10/dist-packages/theano/scan_module/scan_opt.py:60
     57 import numpy as np
     59 import theano
---> 60 from theano import tensor, scalar
     61 from theano.tensor import opt, get_scalar_constant_value, Alloc, AllocEmpty
     62 from theano import gof

File /usr/local/lib/python3.10/dist-packages/theano/tensor/__init__.py:17
     15 from theano.tensor import opt
     16 from theano.tensor import opt_uncanonicalize
---> 17 from theano.tensor import blas
     18 from theano.tensor import blas_scipy
     19 from theano.tensor import blas_c

File /usr/local/lib/python3.10/dist-packages/theano/tensor/blas.py:155
    153 from theano.scalar import bool as bool_t
    154 from theano.tensor import basic as T
--> 155 from theano.tensor.blas_headers import blas_header_text
    156 from theano.tensor.blas_headers import blas_header_version
    157 from theano.tensor.opt import in2out, local_dimshuffle_lift

File /usr/local/lib/python3.10/dist-packages/theano/tensor/blas_headers.py:987
    970             header += textwrap.dedent("""\
    971                     static float sdot_(int* Nx, float* x, int* Sx, float* y, int* Sy)
    972                     {
   (...)
    981                     }
    982                     """)
    984     return header + blas_code
--> 987 if not config.blas.ldflags:
    988     _logger.warning('Using NumPy C-API based implementation for BLAS functions.')
    991 def mkl_threads_text():

File /usr/local/lib/python3.10/dist-packages/theano/configparser.py:332, in ConfigParam.__get__(self, cls, type
_, delete_key)
    330 except KeyError:
    331     if callable(self.default):
--> 332         val_str = self.default()
    333     else:
    334         val_str = self.default

File /usr/local/lib/python3.10/dist-packages/theano/configdefaults.py:1284, in default_blas_ldflags()
   1279 try:
   1280     if (hasattr(np.distutils, '__config__') and
   1281             np.distutils.__config__):
   1282         # If the old private interface is available use it as it
   1283         # don't print information to the user.
-> 1284         blas_info = np.distutils.__config__.blas_opt_info
   1285     else:
   1286         # We do this import only here, as in some setup, if we
   1287         # just import theano and exit, with the import at global
   (...)
   1292
   1293         # This happen with Python 2.7.3 |EPD 7.3-1 and numpy 1.8.1
```

```
  1294         import numpy.distutils.system_info  # noqa

AttributeError: module 'numpy.distutils.__config__' has no attribute 'blas_opt_info'
```

In [ ]:
```
import torch
import torch.nn as nn
print(torch.__version__)
```

1.12.1+cu102

In [ ]:
```
import theano.tensor as tn

try:
    np.distutils.__config__.blas_opt_info = np.distutils.__config__.blas_ilp64_opt_info
except Exception:
    pass
print(np.__version__)
print(tn.__version__)
```

```
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File /usr/local/lib/python3.10/dist-packages/theano/configparser.py:168, in fetch_val_for_key(key, delete_key)
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During handling of the above exception, another exception occurred:

AttributeError                             Traceback (most recent call last)
Cell In [7], line 1
----> 1 import theano.tensor as tn
      3 try:
      4     np.distutils.__config__.blas_opt_info = np.distutils.__config__.blas_ilp64_opt_info

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```

In [ ]:

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