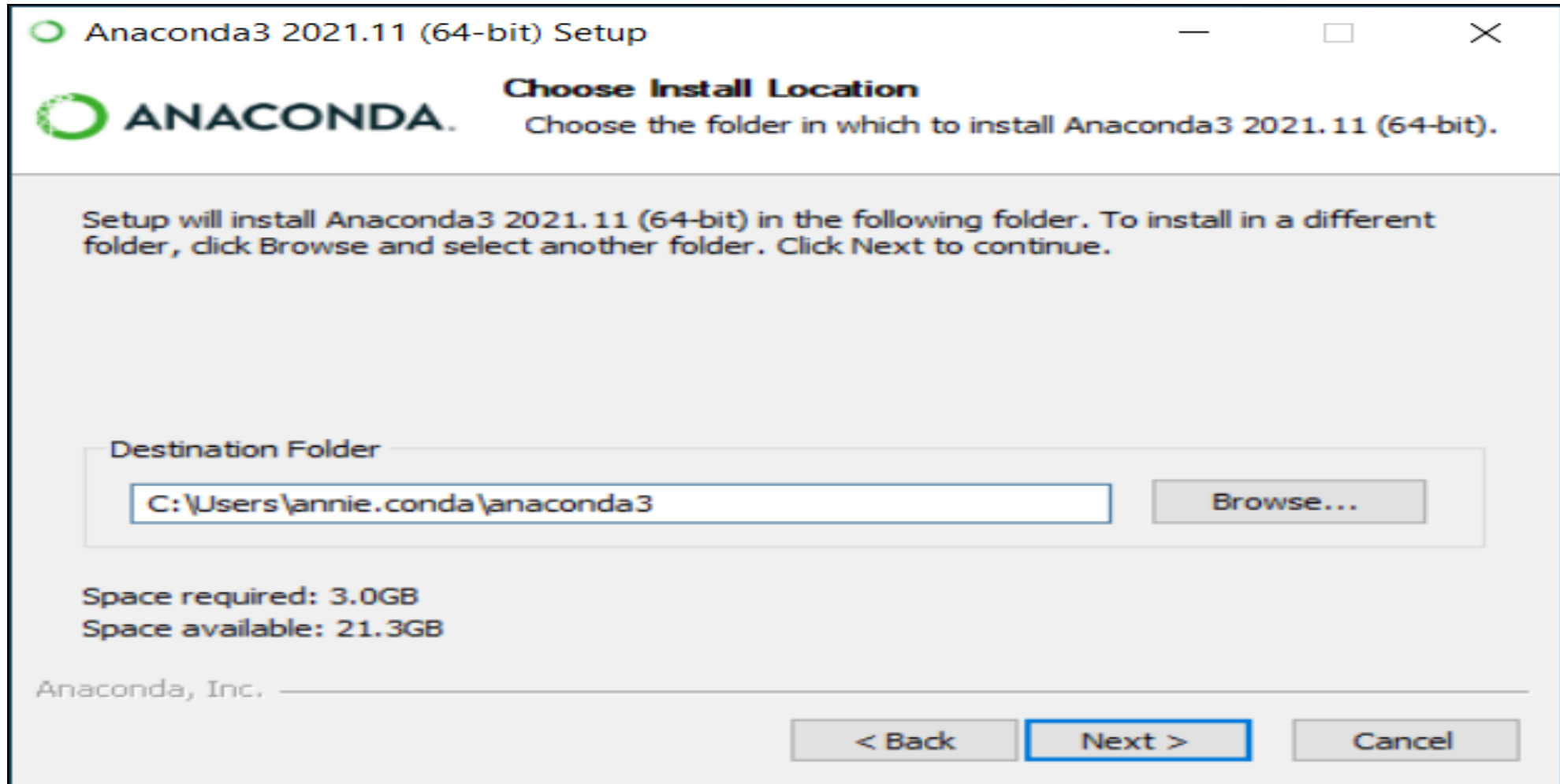
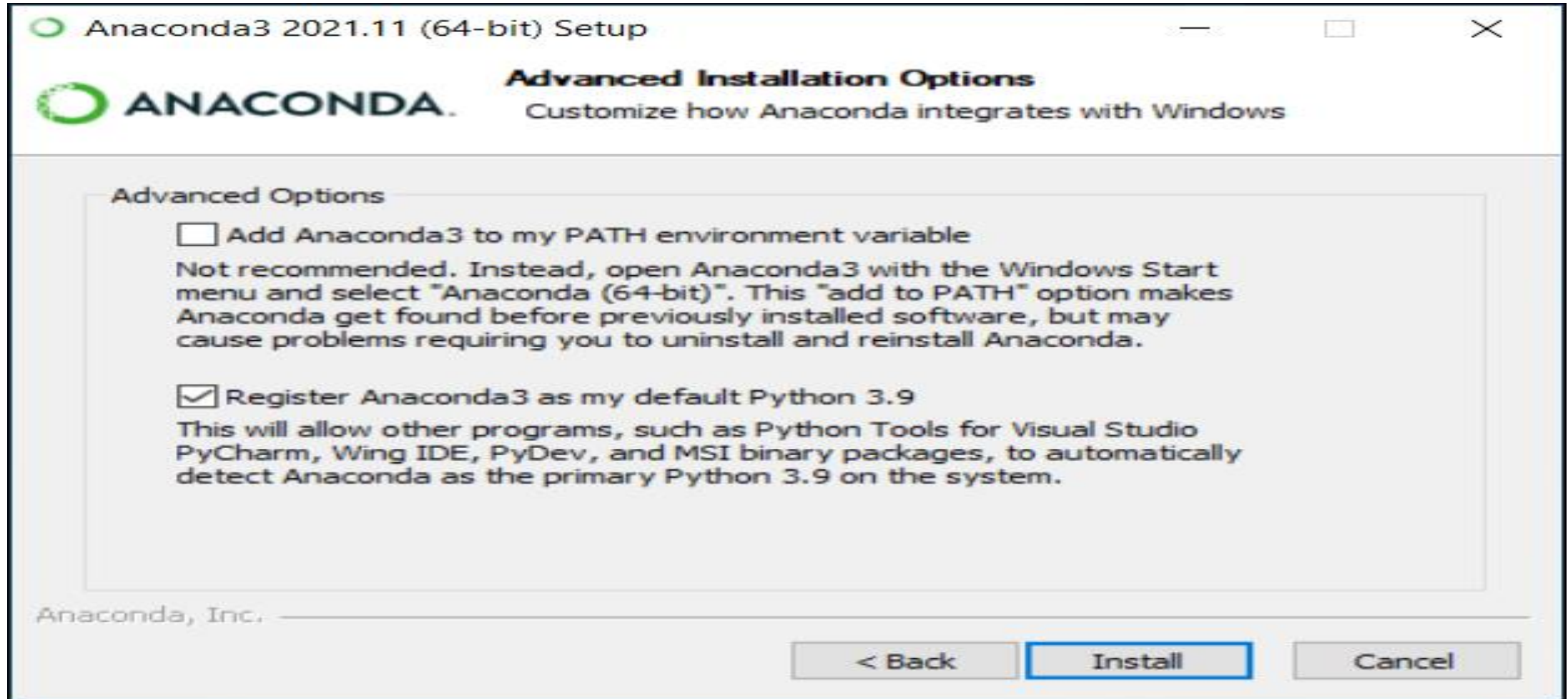


INSTALLATION OF ANACONDA

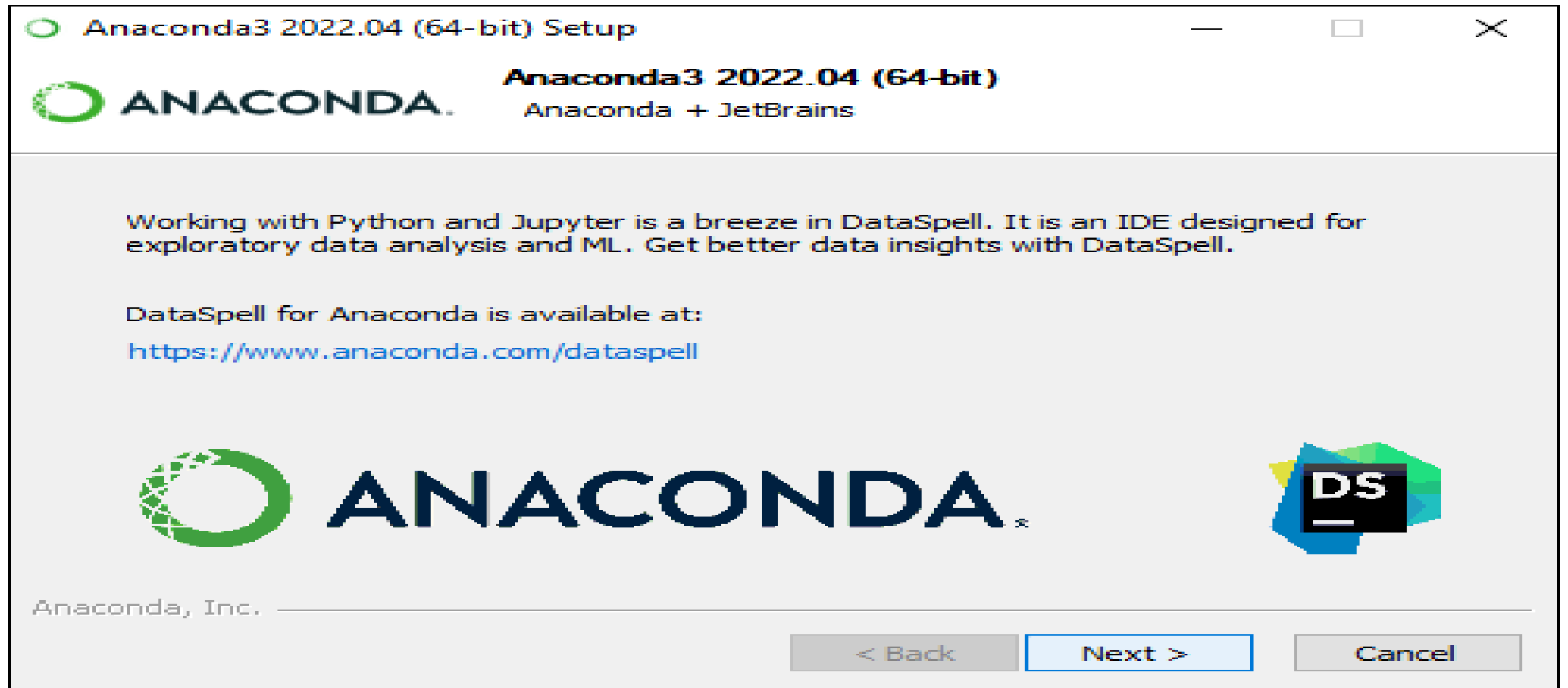
CHOOSE INSTALLATION LOCATION:



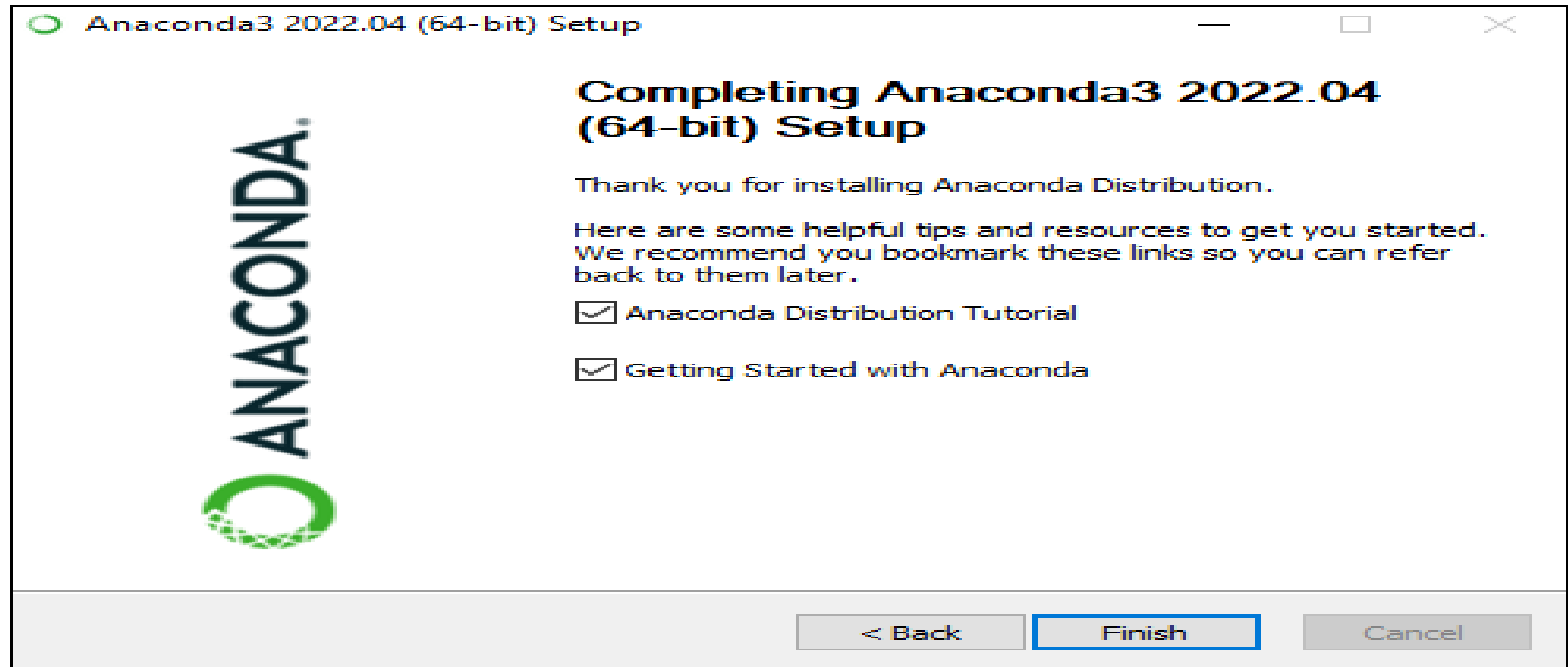
INSTALL ANACONDA:



To install Dataspell for Anaconda, click <https://www.anaconda.com/dataspell>.

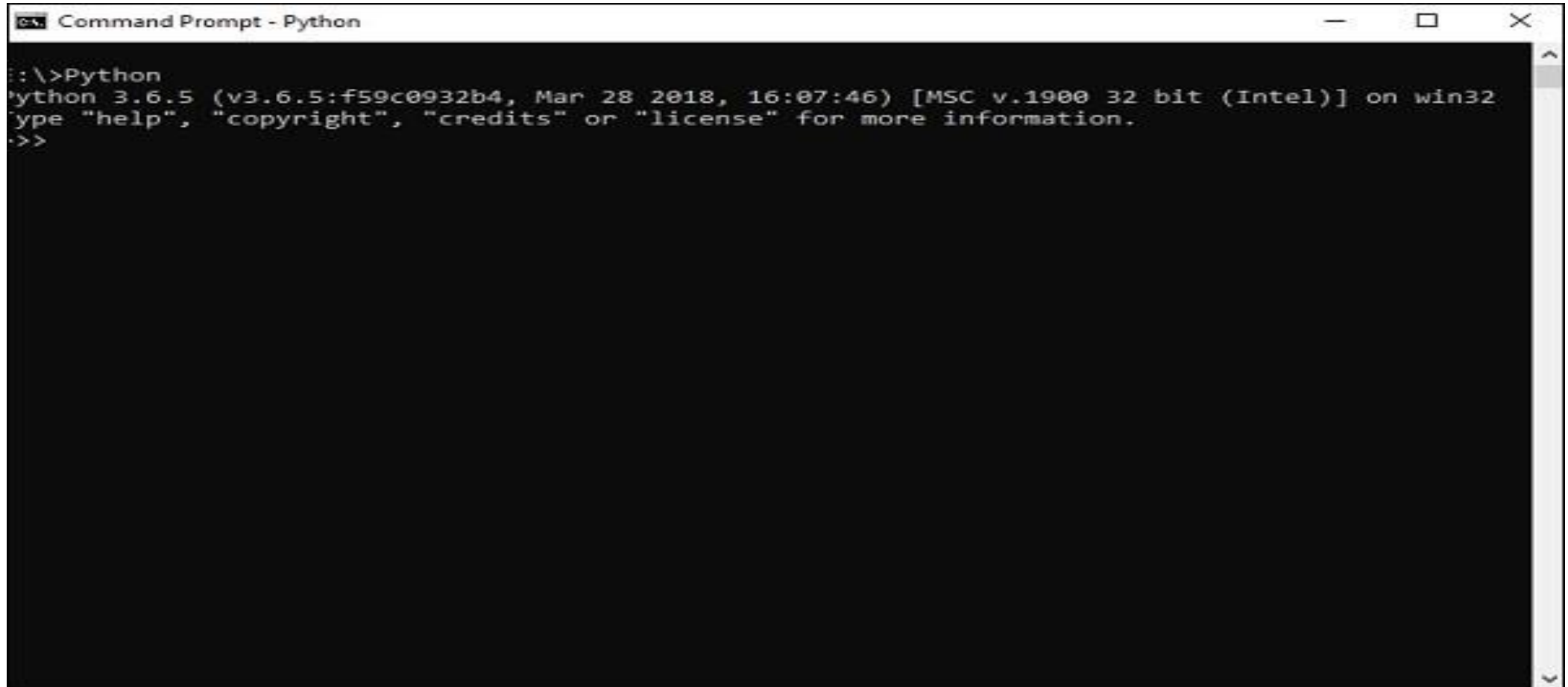


After a successful installation you will see the “Thanks for installing Anaconda” dialog box:



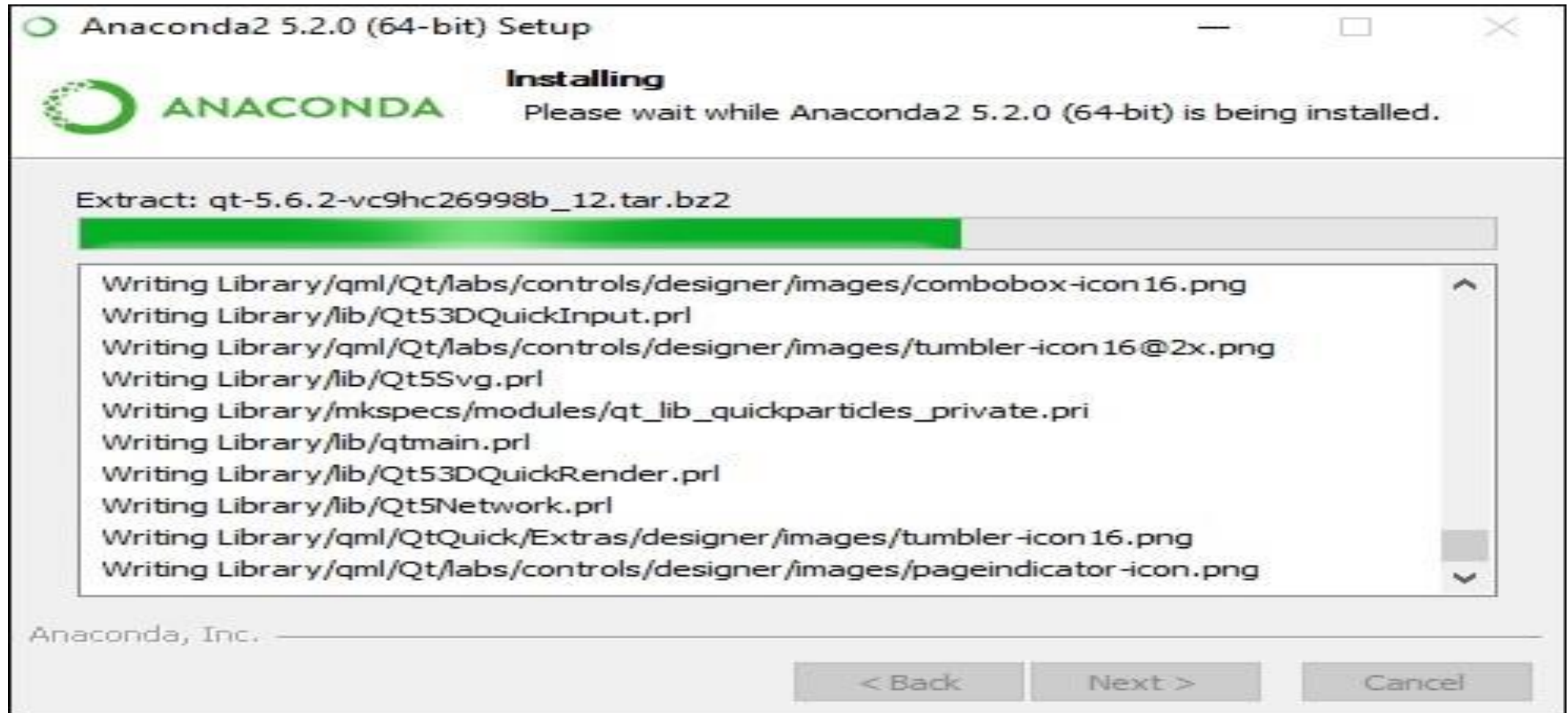
1.INSTALL TENSORFLOW:

- Step 1 – Verify the python version being installed.



```
Command Prompt - Python
C:\>Python
Python 3.6.5 (v3.6.5:f59c0932b4, Mar 28 2018, 16:07:46) [MSC v.1900 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>
```

STEP2:Before we install TensorFlow, we need to install Anaconda framework in our system.



After successful installation, check in command prompt through “conda” command.

```
C:\Users\Radhika>conda
usage: conda [-h] [-V] command ...

conda is a tool for managing and deploying applications, environments and packages.

Options:
positional arguments:
  command
  clean                Remove unused packages and caches.
  config               Modify configuration values in .condarc. This is modeled
                        after the git config command. Writes to the user .condarc
                        file (C:\Users\Radhika\condarc) by default.
  create               Create a new conda environment from a list of specified
                        packages.
  help                 Displays a list of available conda commands and their help
                        strings.
  info                 Display information about current conda install.
  install              Installs a list of packages into a specified conda
                        environment.
  list                 List linked packages in a conda environment.
  package              Low-level conda package utility. (EXPERIMENTAL)
  remove               Remove a list of packages from a specified conda environment.
  uninstall            Alias for conda remove. See conda remove --help.
  search               Search for packages and display associated information. The
                        input is a MatchSpec, a query language for conda packages.
                        See examples below.
```


Step 3 – Execute the following command to initialize the installation of TensorFlow –

create conda--name tensorflow python = 3.5

```
Command Prompt - conda create --name tensorflow python=3.5

vc-14                | h0510ff6_3          | 3 KB
wincertstore-0.2     | py35hfbbdb8_0       | 13 KB
wheel-0.31.1         | py35_0              | 81 KB
certifi-2018.4.16    | py35_0              | 143 KB
python-3.5.5         | h0c2934d_2          | 18.2 MB
-----
Total:               |                    | 20.8 MB

The following NEW packages will be INSTALLED:

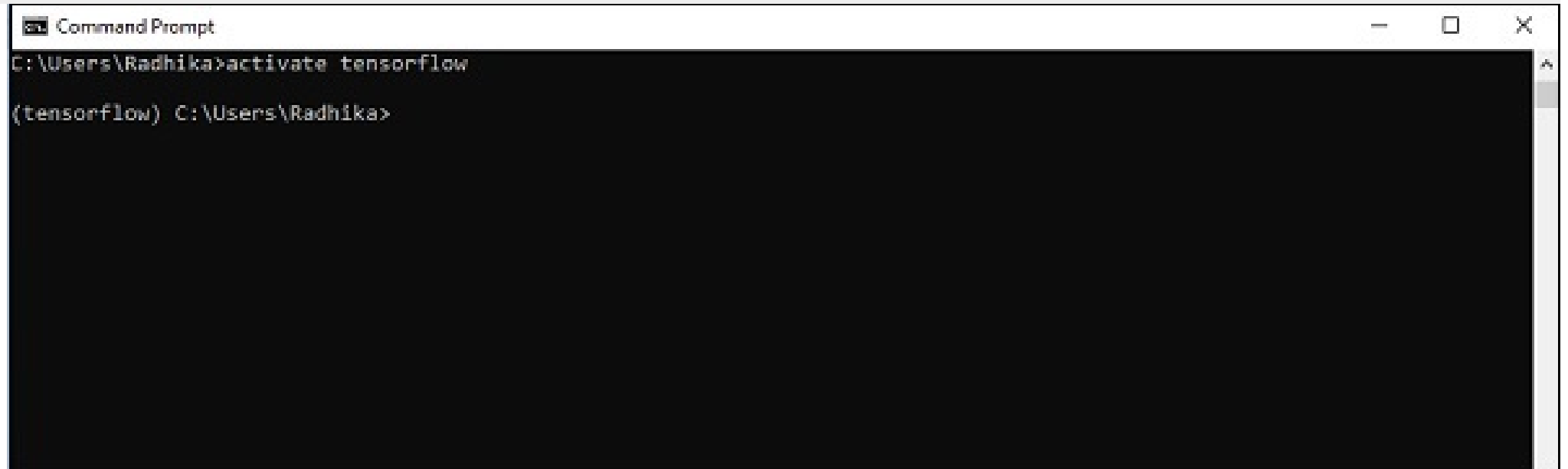
certifi:      2018.4.16-py35_0
pip:          10.0.1-py35_0
python:       3.5.5-h0c2934d_2
setuptools:   39.2.0-py35_0
vc:           14-h0510ff6_3
vs2015_runtime: 14.0.25123-3
wheel:        0.31.1-py35_0
wincertstore: 0.2-py35hfbbdb8_0

Proceed ([y]/n)? y

Downloading and Extracting Packages
pip-10.0.1                | 1.8 MB | ##### | 100%
setuptools-39.2.0         | 593 KB | ##### | 100%
vc-14                     | 3 KB   | ##### | 100%
wincertstore-0.2          | 13 KB  | ##### | 100%
wheel-0.31.1              | 81 KB  | ##### | 100%
certifi-2018.4.16         | 143 KB | ##### | 100%
python-3.5.5              | 18.2 MB | ##### | 70%
```

Step 4 – After successful environmental setup, it is important to activate Tensor Flow module.

activate tensorflow



```
Command Prompt
C:\Users\Radhika>activate tensorflow
(tensorflow) C:\Users\Radhika>
```

Step 5 – Use pip to install “Tensorflow” in the system. The command used for installation

pip install tensorflow

```
Command Prompt - pip install tensorflow
Requirement already satisfied: termcolor>=1.1.0 in c:\users\radhika\anaconda2\envs\tensorflow\lib\site-packages (from tensorflow) (1.1.0)
Requirement already satisfied: numpy>=1.13.3 in c:\users\radhika\anaconda2\envs\tensorflow\lib\site-packages (from tensorflow) (1.14.5)
Requirement already satisfied: grpcio>=1.8.6 in c:\users\radhika\anaconda2\envs\tensorflow\lib\site-packages (from tensorflow) (1.12.1)
Requirement already satisfied: wheel>=0.26 in c:\users\radhika\anaconda2\envs\tensorflow\lib\site-packages (from tensorflow) (0.31.1)
Requirement already satisfied: six>=1.10.0 in c:\users\radhika\anaconda2\envs\tensorflow\lib\site-packages (from tensorflow) (1.11.0)
Requirement already satisfied: absl-py>=0.1.6 in c:\users\radhika\anaconda2\envs\tensorflow\lib\site-packages (from tensorflow) (0.2.2)
Requirement already satisfied: astor>=0.6.0 in c:\users\radhika\anaconda2\envs\tensorflow\lib\site-packages (from tensorflow) (0.6.2)
Requirement already satisfied: gast>=0.2.0 in c:\users\radhika\anaconda2\envs\tensorflow\lib\site-packages (from tensorflow) (0.2.0)
Requirement already satisfied: tensorboard<1.9.0,>=1.8.0 in c:\users\radhika\anaconda2\envs\tensorflow\lib\site-packages (from tensorflow) (1.8.0)
Requirement already satisfied: setuptools in c:\users\radhika\anaconda2\envs\tensorflow\lib\site-packages (from protobuf>=3.4.0->tensorflow) (39.2.0)
Requirement already satisfied: html5lib==0.9999999 in c:\users\radhika\anaconda2\envs\tensorflow\lib\site-packages (from tensorboard<1.9.0,>=1.8.0->tensorflow) (0.9999999)
Requirement already satisfied: bleach==1.5.0 in c:\users\radhika\anaconda2\envs\tensorflow\lib\site-packages (from tensorboard<1.9.0,>=1.8.0->tensorflow) (1.5.0)
Requirement already satisfied: markdown>=2.6.8 in c:\users\radhika\anaconda2\envs\tensorflow\lib\site-packages (from tensorboard<1.9.0,>=1.8.0->tensorflow) (2.6.11)
Requirement already satisfied: Werkzeug>=0.11.10 in c:\users\radhika\anaconda2\envs\tensorflow\lib\site-packages (from tensorboard<1.9.0,>=1.8.0->tensorflow) (0.14.1)
Installing collected packages: tensorflow
```

“Hello World” in TensorFlow.

```
C:\Users\Radhika>activate tensorflow

(tensorflow) C:\Users\Radhika>python
Python 3.5.5 |Anaconda, Inc.| (default, Apr 7 2018, 04:52:34) [MSC v.1900 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> import tensorflow as tf
>>> hello = tf.constant('Hello, Tensorflow!')
>>> sess = tf.session()
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
AttributeError: module 'tensorflow' has no attribute 'session'
>>> sess = tf.Session()
2018-06-28 11:12:04.586763: I T:\src\github\tensorflow\tensorflow\core\platform\cpu_feature_guard.cc:140] Your CPU supports instructions that this TensorFlow binary was not compiled to use: AVX2
>>> print(sess.run(hello))
b'Hello, Tensorflow!'
>>>
```

KERAS-INSTALLATION

- Step 1: Create virtual environment
- **Virtualenv** is used to manage Python packages for different projects.

```
py m venv keras -
```

Step 2: Activate the environment

This step will configure python and pip executables in your shell path.

```
.\env\Scripts\activate
```

Step 3: Python libraries

Keras depends on the following python libraries.

Numpy

Pandas

Scikit-learn

Matplotlib

Scipy

Seaborn

Install Keras

Now, everything looks good so you can start keras installation using –

conda install -c anaconda keras

Launch spyder

Finally, launch spyder in your conda terminal using –

spyder

INSTALLATION OF FLASK:

Install virtualenv on Windows

1. Open the command line with administrator privileges.
2. Use `pip` to install *virtualenv* on Windows:
`py -2 -m pip install virtualenv`

Create an Environment in Windows

For Python 3:

py -3 -m venv <name of environment>

```
C:\Users\crnag\Desktop\test>dir *test*
Volume in drive C has no label.
Volume Serial Number is B233-659C

Directory of C:\Users\crnag\Desktop\test

02/03/2021  04:18 PM    <DIR>          vtest
               0 File(s)                0 bytes
               1 Dir(s)  113,250,988,032 bytes free
```

Step 3: Activate the environment

```
C:\Users\crnag\Desktop\test>vtest\Scripts\activate
```

```
(vtest) C:\Users\crnag\Desktop\test>
```

Step 4: Install Flask

- `pip install Flask`

Step 5: Test the Development Environment

```
from flask import Flask  
app = Flask(__name__)  
@app.route('/')  
def hello_world():  
    return 'Hello world!'
```