# **Big Data Analytics**

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# Software Preparation

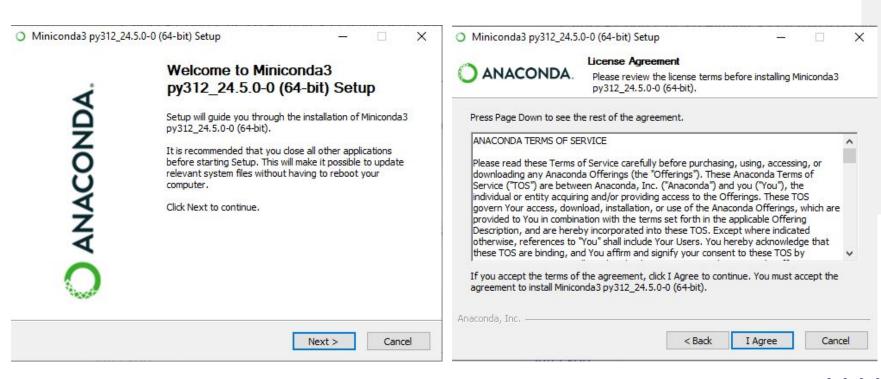


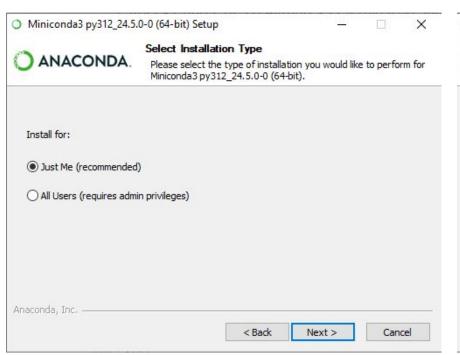


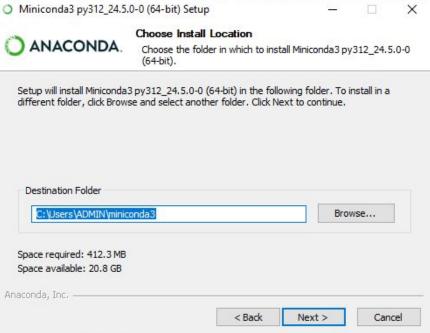
### **Download Miniconda**

• Download Miniconda here

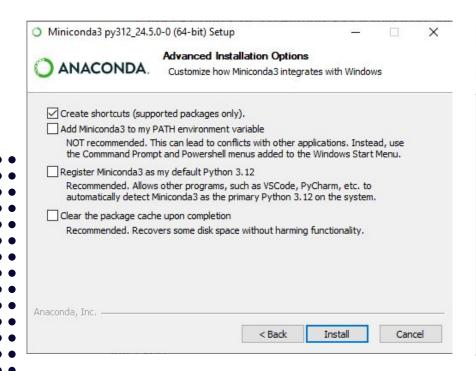
Platform	Name	SHA256 hash
Windows	Miniconda3 Windows 64-bit	b1ce11a339c8246010e898065f6fa6feb1940a55fefd550b57a
macOS	Miniconda3 macOS Intel x86 64-bit bash	b1c87c8334ea878d30a9976c1860b1004e6d55bdec5228089fe

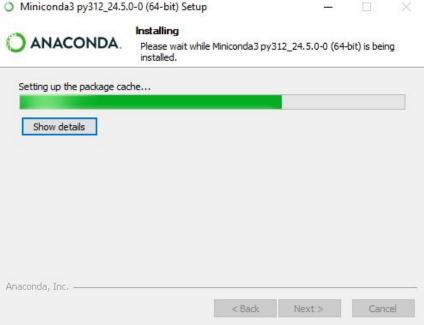


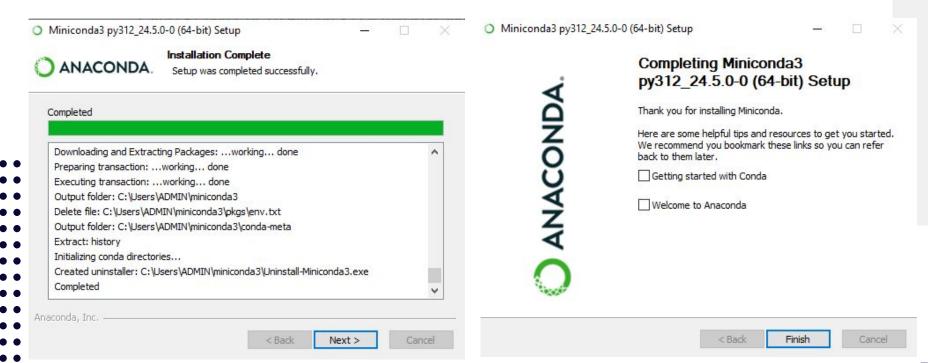














- Type ">" in search or use Ctrl+Shift+P
- Type "Python: Select Interpreter"
- Select Python <version> ('base') ~\miniforge3\python.exe



# **Install Pyspark**

- Use command: conda install pyspark
- Proceed ([y]/n)? Type y

```
The following packages will be UPDATED:

certifi 2024.6.2-py312haa95532_0 --> 2024.7.4-py312haa95532_0

Proceed ([y]/r)? y

Downloading and Extracting Packages:

Preparing transaction: done
Verifying transaction: done
Executing transaction: done
Executing transaction: done
```

```
(base) PS D:\bigdata analytics\bigdata analytics2024> conda install pyspark
Retrieving notices: ...working... done
Channels:
- defaults
Platform: win-64
Collecting package metadata (repodata.json): done
Solving environment: done
## Package Plan ##
 environment location: C:\Users\ADMIN\miniconda3
 added / updated specs:
    - pyspark
The following packages will be downloaded:
                                           build
    package
    abseil-cpp-20211102.0
                                                         1.7 MB
                                      hd77b12b 0
    blas-1.0
                                              mk1
                                                           6 KB
   c-ares-1.19.1
                                      h2bbff1b 0
                                                         117 KB
    certifi-2024.7.4
                                  py312haa95532 0
                                                         160 KB
                                      hfe90ff0 1
                                                         23.5 MB
    grpc-cpp-1.48.2
    libevent-2.1.12
                                      h56d1f94 1
                                                         417 KB
    libprotobuf-3.20.3
                                      h23ce68f 0
                                                         2.2 MB
    libthrift-0.15.0
                                      h4364b78 2
                                                         777 KB
    orc-1.7.4
                                       h623e30f 1
                                                         823 KB
    python-tzdata-2023.3
                                     pyhd3eb1b0 0
                                                         140 KB
   re2-2022.04.01
                                      hd77b12b 0
                                                         374 KB
    six-1.16.0
                                     pyhd3eb1b0 1
                                                          18 KB
    thh-2021.8.0
                                       h59b6b97 0
                                                          149 KB
                                           Total:
                                                         30.3 MB
    following NEW packages will be INSTALLED:
```

## **Test Pyspark**

Use command: pyspark

```
(base) PS D:\bigdata analytics\bigdata analytics2024 pyspark
Python 3.12.4 | packaged by Anaconda, Inc. | (main, bun 18 2024, 15:03:56) [MSC v.1929 64 bit (AMD64)] o
n win32
Type "help", "copyright", "credits" or "license" for more information.
24/07/10 14:52:46 WARN Shell: Did not find winutils.exe: java.io.FileNotFoundException: java.io.FileNotF
oundException: HADOOP HOME and hadoop.home.dir are unset. -see https://wiki.apache.org/hadoop/WindowsPro
blems
Setting default log level to "WARN".
To adjust logging level use sc.setLogLevel(newLevel). For SparkR, use setLogLevel(newLevel).
24/07/10 14:52:47 WARN NativeCodeLoader: Unable to load native-hadoop library for your platform... using
 builtin-java classes where applicable
24/07/10 14:52:49 WARN Utils: Service 'SparkUI' could not bind on port 4040. Attempting port 4041.
Welcome to
Using Python version 3.12.4 (main, Jun 18 2024 15:03:56)
Spark context Web UI available at http://PC02:4041
Spark context available as 'sc' (master = local[*], app id = local-1720597969361).
SparkSession available as 'spark'.
>>>
```