

# Prerequisites

Date	19 November 2022
Team ID	PNT2022TMID41657
Project Name	AI-Powered Nutrition Analyzer For Fitness Enthusiasts

## **ANACONDA NAVIGATOR :**

Anaconda Navigator is a free and open-source distribution of the Python and R programming languages for data science and machine learning-related applications. It can be installed on Windows, Linux, and macOS. Conda is an open-source, cross-platform, package management system. Anaconda comes with great tools like JupyterLab, Jupyter Notebook, QtConsole, Spyder, Glueviz, Orange, Rstudio, Visual Studio Code.

For this project, we will be using a Jupyter notebook and Spyder.

Home

Environments

Learning

Community

Anaconda  
NotebooksCloud notebooks with  
hundreds of packages  
ready to code.

Learn More

A Full Python IDE  
directly from the

Documentation

Anaconda Blog



Applications on base (root)

Channels



CMD.exe Prompt

0.1.1

Run a cmd.exe terminal with your current environment from Navigator activated

Launch



Datalore

Online Data Analysis Tool with smart coding assistance by JetBrains. Edit and run your Python notebooks in the cloud and share them with your team.

Launch



IBM Watson Studio Cloud

IBM Watson Studio Cloud provides you the tools to analyze and visualize data, to cleanse and shape data, to create and train machine learning models. Prepare data and build models, using open source data science tools or visual modeling.

Launch



JupyterLab

3.3.2

An extensible environment for interactive and reproducible computing, based on the Jupyter Notebook and Architecture.

Launch



Jupyter Notebook

6.4.8

Web-based, interactive computing notebook environment. Edit and run human-readable docs while describing the data analysis.

Launch



Powershell Prompt

0.0.1

Run a Powershell terminal with your current environment from Navigator activated

Launch



PyCharm Community

2021.3.2

An IDE by JetBrains for pure Python development. Supports code completion, listing, and debugging.

Launch



Qt Console

5.3.0

PyQt GUI that supports inline figures, proper multiline editing with syntax highlighting, graphical calltips, and more.

Launch



Spyder

5.1.5

Scientific Python Development Environment. Powerful Python IDE with advanced editing, interactive testing, debugging and introspection features

Launch



Glueviz

1.0.0

Multidimensional data visualization across files. Explore relationships within and among related datasets.

Install



Orange 3

3.32.0

Component based data mining framework. Data visualization and data analysis for novice and expert. Interactive workflows with a large toolbox.

Install



PyCharm Professional

A full-fledged IDE by JetBrains for both Scientific and Web Python development. Supports HTML, JS, and SQL.

Install



RStudio

1.1.456

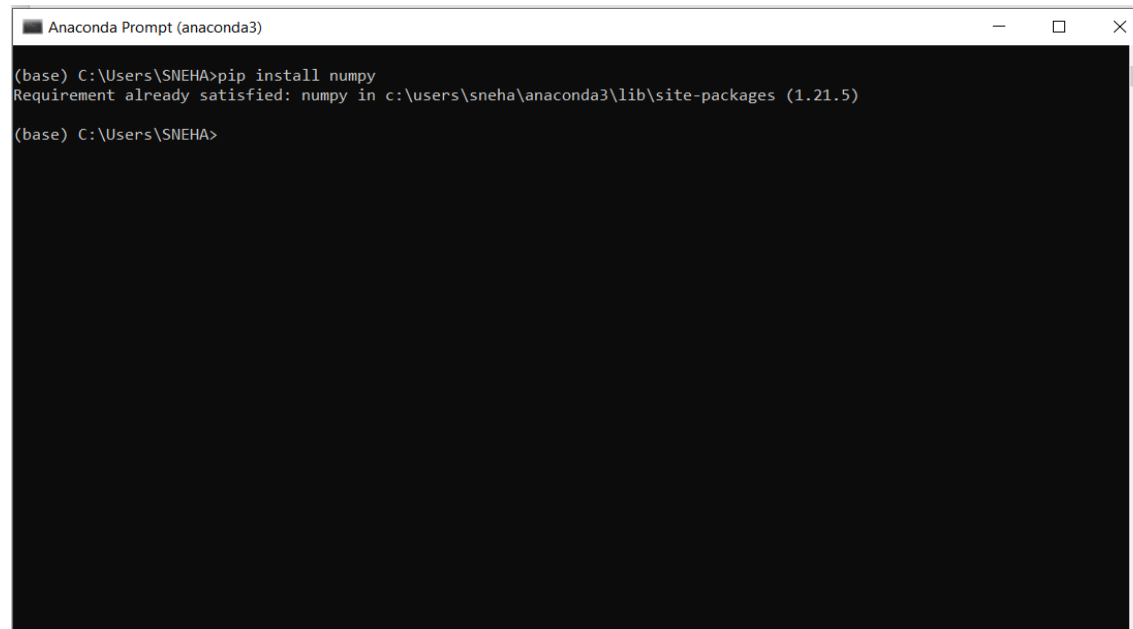
A set of integrated tools designed to help you be more productive with R. Includes R essentials and notebooks.



- Python packages:
  - open anaconda prompt as administrator

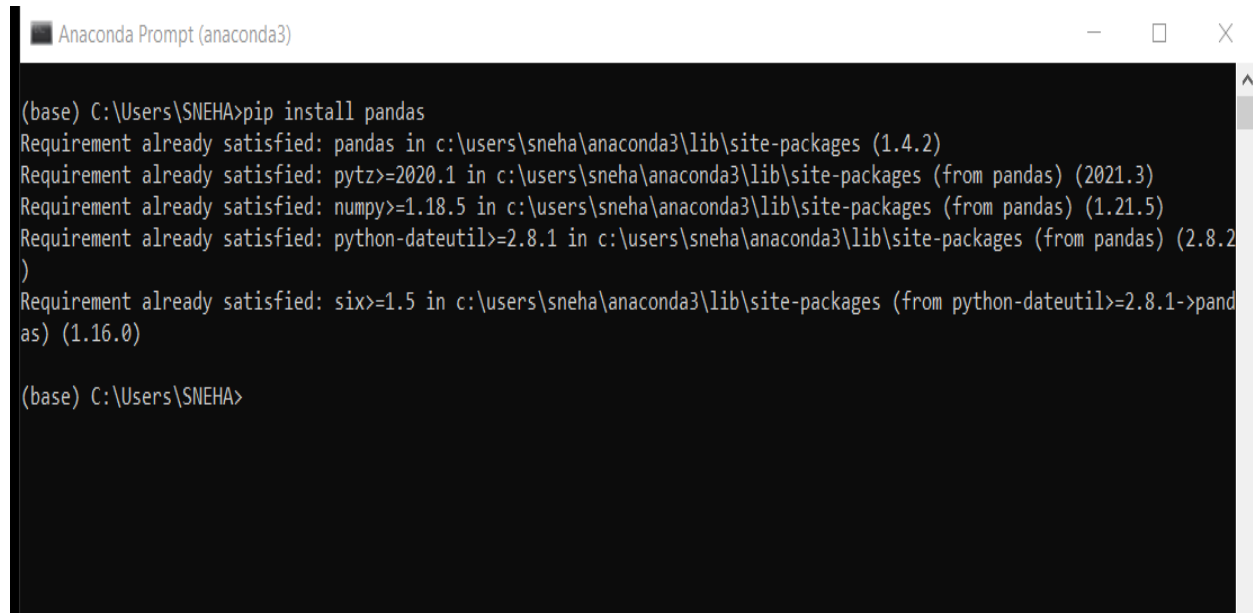


- Type “pip install numpy” and click enter



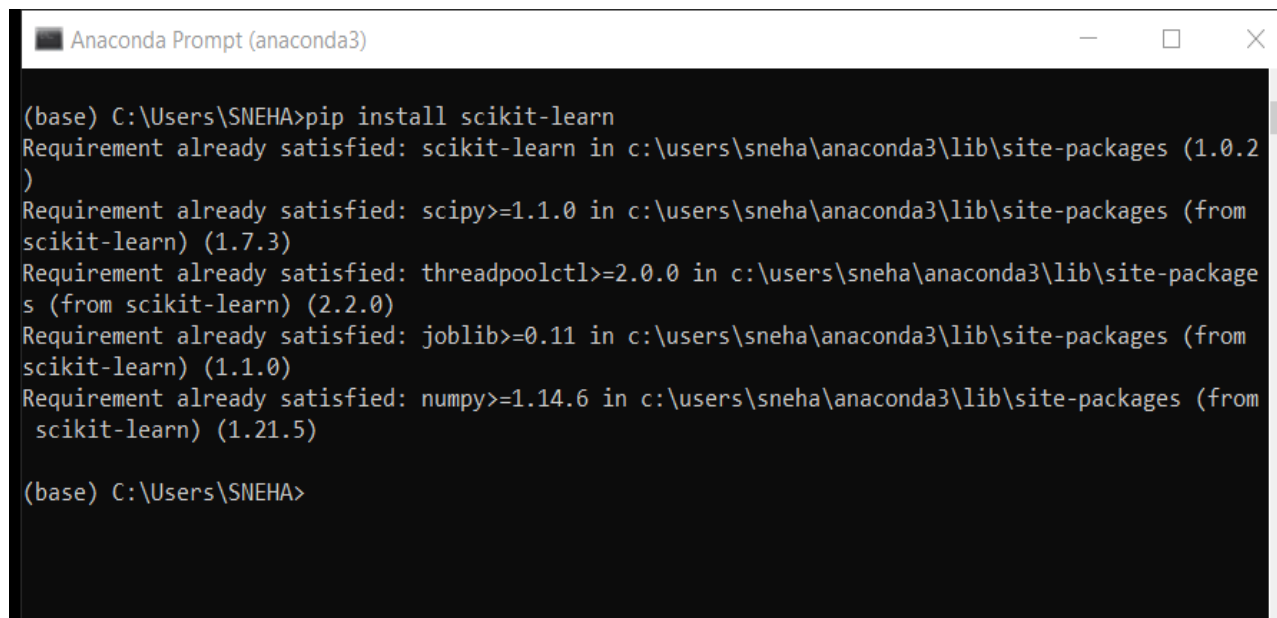
```
Anaconda Prompt (anaconda3)
(base) C:\Users\SNEHA>pip install numpy
Requirement already satisfied: numpy in c:\users\sneha\anaconda3\lib\site-packages (1.21.5)
(base) C:\Users\SNEHA>
```

- Type “pip install pandas” and click enter.



```
Anaconda Prompt (anaconda3)
(base) C:\Users\SNEHA>pip install pandas
Requirement already satisfied: pandas in c:\users\sneha\anaconda3\lib\site-packages (1.4.2)
Requirement already satisfied: pytz>=2020.1 in c:\users\sneha\anaconda3\lib\site-packages (from pandas) (2021.3)
Requirement already satisfied: numpy>=1.18.5 in c:\users\sneha\anaconda3\lib\site-packages (from pandas) (1.21.5)
Requirement already satisfied: python-dateutil>=2.8.1 in c:\users\sneha\anaconda3\lib\site-packages (from pandas) (2.8.2)
Requirement already satisfied: six>=1.5 in c:\users\sneha\anaconda3\lib\site-packages (from python-dateutil>=2.8.1->pandas) (1.16.0)
(base) C:\Users\SNEHA>
```

- Type “pip install scikit-learn” and click enter.



```
Anaconda Prompt (anaconda3)
(base) C:\Users\SNEHA>pip install scikit-learn
Requirement already satisfied: scikit-learn in c:\users\sneha\anaconda3\lib\site-packages (1.0.2)
Requirement already satisfied: scipy>=1.1.0 in c:\users\sneha\anaconda3\lib\site-packages (from scikit-learn) (1.7.3)
Requirement already satisfied: threadpoolctl>=2.0.0 in c:\users\sneha\anaconda3\lib\site-packages (from scikit-learn) (2.2.0)
Requirement already satisfied: joblib>=0.11 in c:\users\sneha\anaconda3\lib\site-packages (from scikit-learn) (1.1.0)
Requirement already satisfied: numpy>=1.14.6 in c:\users\sneha\anaconda3\lib\site-packages (from scikit-learn) (1.21.5)
(base) C:\Users\SNEHA>
```

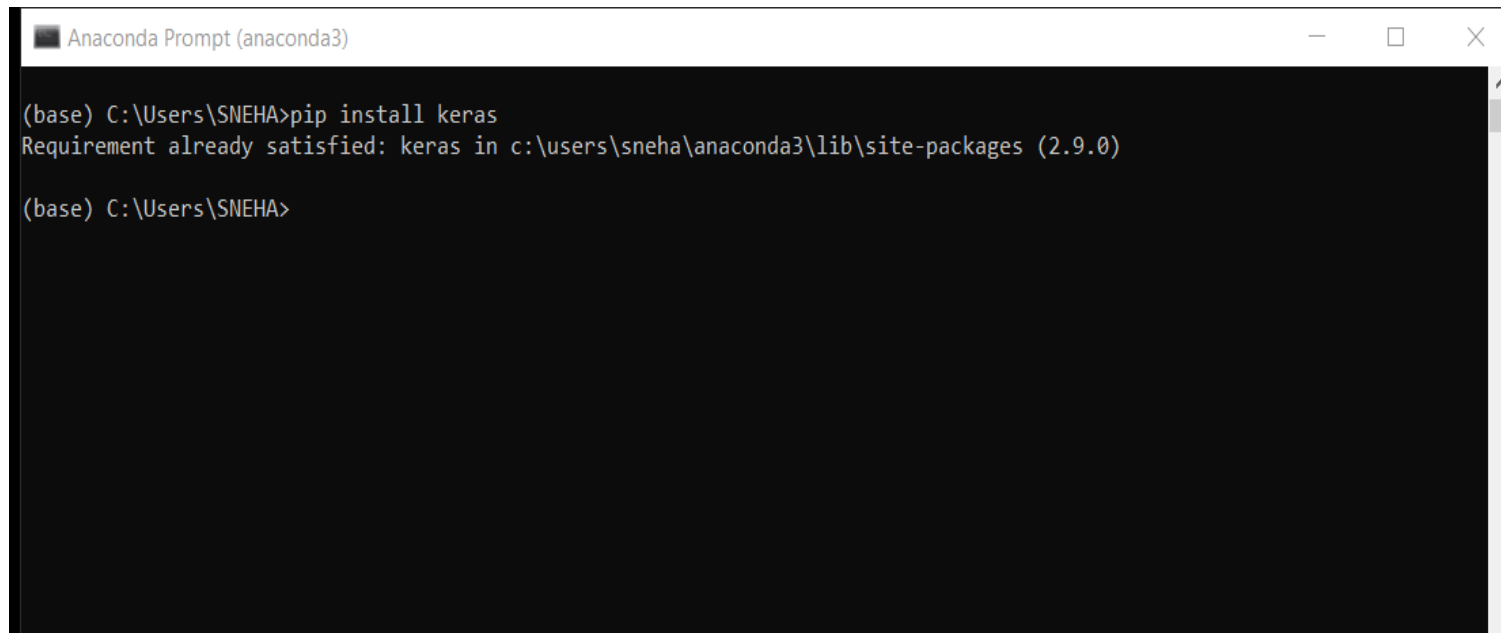
- Type “pip install tensorflow==2.3.0” and click enter.

```
Anaconda Prompt (anaconda3)

(base) C:\Users\SNEHA>pip install tensorflow
Requirement already satisfied: tensorflow in c:\users\sneha\anaconda3\lib\site-packages (2.9.1)
Requirement already satisfied: termcolor>=1.1.0 in c:\users\sneha\anaconda3\lib\site-packages (from tensorflow) (1.1.0)
Requirement already satisfied: numpy>=1.20 in c:\users\sneha\anaconda3\lib\site-packages (from tensorflow) (1.21.5)
Requirement already satisfied: libclang>=13.0.0 in c:\users\sneha\anaconda3\lib\site-packages (from tensorflow) (14.0.6)
Requirement already satisfied: gast<=0.4.0,>=0.2.1 in c:\users\sneha\anaconda3\lib\site-packages (from tensorflow) (0.4.0)
Requirement already satisfied: opt-einsum>=2.3.2 in c:\users\sneha\anaconda3\lib\site-packages (from tensorflow) (3.3.0)
Requirement already satisfied: google-pasta>=0.1.1 in c:\users\sneha\anaconda3\lib\site-packages (from tensorflow) (0.2.0)
Requirement already satisfied: keras<2.10.0,>=2.9.0rc0 in c:\users\sneha\anaconda3\lib\site-packages (from tensorflow) (2.9.0)
Requirement already satisfied: six>=1.12.0 in c:\users\sneha\anaconda3\lib\site-packages (from tensorflow) (1.16.0)
Requirement already satisfied: setuptools in c:\users\sneha\anaconda3\lib\site-packages (from tensorflow) (61.2.0)
Requirement already satisfied: protobuf<3.20,>=3.9.2 in c:\users\sneha\anaconda3\lib\site-packages (from tensorflow) (3.19.1)
Requirement already satisfied: grpcio<2.0,>=1.24.3 in c:\users\sneha\anaconda3\lib\site-packages (from tensorflow) (1.42.0)
Requirement already satisfied: absl-py>=1.0.0 in c:\users\sneha\anaconda3\lib\site-packages (from tensorflow) (1.2.0)
Requirement already satisfied: tensorboard<2.10,>=2.9 in c:\users\sneha\anaconda3\lib\site-packages (from tensorflow) (2.9.1)
Requirement already satisfied: packaging in c:\users\sneha\anaconda3\lib\site-packages (from tensorflow) (21.3)
Requirement already satisfied: astunparse>=1.6.0 in c:\users\sneha\anaconda3\lib\site-packages (from tensorflow) (1.6.3)
Requirement already satisfied: h5py>=2.9.0 in c:\users\sneha\anaconda3\lib\site-packages (from tensorflow) (3.6.0)
Requirement already satisfied: tensorflow-io-gcs-filesystem>=0.23.1 in c:\users\sneha\anaconda3\lib\site-packages (from tensorflow) (0.26.0)
Requirement already satisfied: wrapt>=1.11.0 in c:\users\sneha\anaconda3\lib\site-packages (from tensorflow) (1.12.1)
Requirement already satisfied: typing-extensions>=3.6.6 in c:\users\sneha\anaconda3\lib\site-packages (from tensorflow) (4.1.1)
Requirement already satisfied: flatbuffers<2,>=1.12 in c:\users\sneha\anaconda3\lib\site-packages (from tensorflow) (1.12)
Requirement already satisfied: keras-preprocessing>=1.1.1 in c:\users\sneha\anaconda3\lib\site-packages (from tensorflow) (1.1.2)
Requirement already satisfied: tensorflow-estimator<2.10.0,>=2.9.0rc0 in c:\users\sneha\anaconda3\lib\site-packages (from tensorflow) (2.9.0)
Requirement already satisfied: wheel<1.0,>=0.23.0 in c:\users\sneha\anaconda3\lib\site-packages (from astunparse>=1.6.0->tensorflow) (0.37.1)
Requirement already satisfied: werkzeug>=1.0.1 in c:\users\sneha\anaconda3\lib\site-packages (from tensorboard<2.10,>=2.9->tensorflow) (2.0.3)
Requirement already satisfied: markdown>=2.6.8 in c:\users\sneha\anaconda3\lib\site-packages (from tensorboard<2.10,>=2.9->tensorflow) (3.3.4)
Requirement already satisfied: tensorboard-plugin-wit>=1.6.0 in c:\users\sneha\anaconda3\lib\site-packages (from tensorboard<2.10,>=2.9->tensorflow) (1.8.1)
Requirement already satisfied: google-auth<3,>=1.6.3 in c:\users\sneha\anaconda3\lib\site-packages (from tensorboard<2.10,>=2.9->tensorflow) (1.33.0)
Requirement already satisfied: tensorboard-data-server<0.7.0,>=0.6.0 in c:\users\sneha\anaconda3\lib\site-packages (from tensorboard<2.10,>=2.9->tensorflow) (0.6.1)
Requirement already satisfied: requests<3,>=2.21.0 in c:\users\sneha\anaconda3\lib\site-packages (from tensorboard<2.10,>=2.9->tensorflow) (2.27.1)
Requirement already satisfied: google-auth-oauthlib<0.5,>=0.4.1 in c:\users\sneha\anaconda3\lib\site-packages (from tensorboard<2.10,>=2.9->tensorflow) (0.4.6)
Requirement already satisfied: rsa<5,>=3.1.4 in c:\users\sneha\anaconda3\lib\site-packages (from google-auth<3,>=1.6.3->tensorboard<2.10,>=2.9->tensorflow) (4.7.2)
Requirement already satisfied: cachetools<5.0,>=2.0.0 in c:\users\sneha\anaconda3\lib\site-packages (from google-auth<3,>=1.6.3->tensorboard<2.10,>=2.9->tensorflow) (4.2.2)
Requirement already satisfied: pyasn1-modules>=0.2.1 in c:\users\sneha\anaconda3\lib\site-packages (from google-auth<3,>=1.6.3->tensorboard<2.10,>=2.9->tensorflow) (0.2.8)
Requirement already satisfied: requests-oauthlib>=0.7.0 in c:\users\sneha\anaconda3\lib\site-packages (from google-auth-oauthlib<0.5,>=0.4.1->tensorboard<2.10,>=2.9->tensorflow) (1.3.1)
Requirement already satisfied: pyasn1<0.5.0,>=0.4.6 in c:\users\sneha\anaconda3\lib\site-packages (from pyasn1-modules>=0.2.1->google-auth<3,>=1.6.3->tensorboard<2.10,>=2.9->tensorflow) (0.4.8)
Requirement already satisfied: urllib3<1.27,>=1.21.1 in c:\users\sneha\anaconda3\lib\site-packages (from requests<3,>=2.21.0->tensorboard<2.10,>=2.9->tensorflow) (1.26.9)
Requirement already satisfied: idna<4,>=2.5 in c:\users\sneha\anaconda3\lib\site-packages (from requests<3,>=2.21.0->tensorboard<2.10,>=2.9->tensorflow) (3.3)
Requirement already satisfied: charset-normalizer<=2.0.0 in c:\users\sneha\anaconda3\lib\site-packages (from requests<3,>=2.21.0->tensorboard<2.10,>=2.9->tensorflow) (2.0.4)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\sneha\anaconda3\lib\site-packages (from requests<3,>=2.21.0->tensorboard<2.10,>=2.9->tensorflow) (2021.10.8)
Requirement already satisfied: oauthlib>=3.0.0 in c:\users\sneha\anaconda3\lib\site-packages (from requests-oauthlib>=0.7.0->google-auth-oauthlib<0.5,>=0.4.1->tensorboard<2.10,>=2.9->tensorflow) (3.2.0)
Requirement already satisfied: pyparsing<=3.0.5,>=2.0.2 in c:\users\sneha\anaconda3\lib\site-packages (from packaging->tensorflow) (3.0.4)

(base) C:\Users\SNEHA>
```

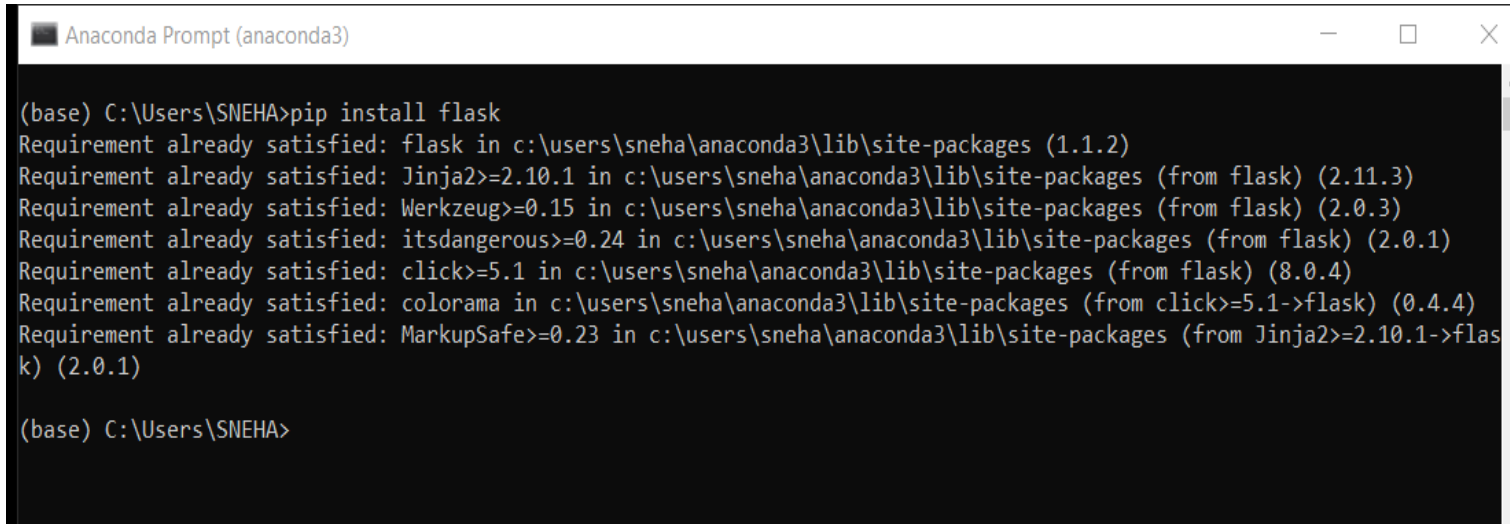
- Type “pip install keras==2.4.0” and click enter.



```
Anaconda Prompt (anaconda3)
(base) C:\Users\SNEHA>pip install keras
Requirement already satisfied: keras in c:\users\sneha\anaconda3\lib\site-packages (2.9.0)
(base) C:\Users\SNEHA>
```



- Type “pip install Flask” and click enter

A screenshot of an Anaconda Prompt window. The title bar reads "Anaconda Prompt (anaconda3)". The command prompt shows the user typing "(base) C:\Users\SNEHA>pip install flask". The output displays several dependency requirements that are already satisfied, including flask (1.1.2), Jinja2 (2.11.3), Werkzeug (2.0.3), itsdangerous (2.0.1), click (8.0.4), colorama (0.4.4), and MarkupSafe (2.0.1). The prompt then returns to "(base) C:\Users\SNEHA>".

```
(base) C:\Users\SNEHA>pip install flask
Requirement already satisfied: flask in c:\users\sneha\anaconda3\lib\site-packages (1.1.2)
Requirement already satisfied: Jinja2>=2.10.1 in c:\users\sneha\anaconda3\lib\site-packages (from flask) (2.11.3)
Requirement already satisfied: Werkzeug>=0.15 in c:\users\sneha\anaconda3\lib\site-packages (from flask) (2.0.3)
Requirement already satisfied: itsdangerous>=0.24 in c:\users\sneha\anaconda3\lib\site-packages (from flask) (2.0.1)
Requirement already satisfied: click>=5.1 in c:\users\sneha\anaconda3\lib\site-packages (from flask) (8.0.4)
Requirement already satisfied: colorama in c:\users\sneha\anaconda3\lib\site-packages (from click>=5.1->flask) (0.4.4)
Requirement already satisfied: MarkupSafe>=0.23 in c:\users\sneha\anaconda3\lib\site-packages (from Jinja2>=2.10.1->flask) (2.0.1)

(base) C:\Users\SNEHA>
```