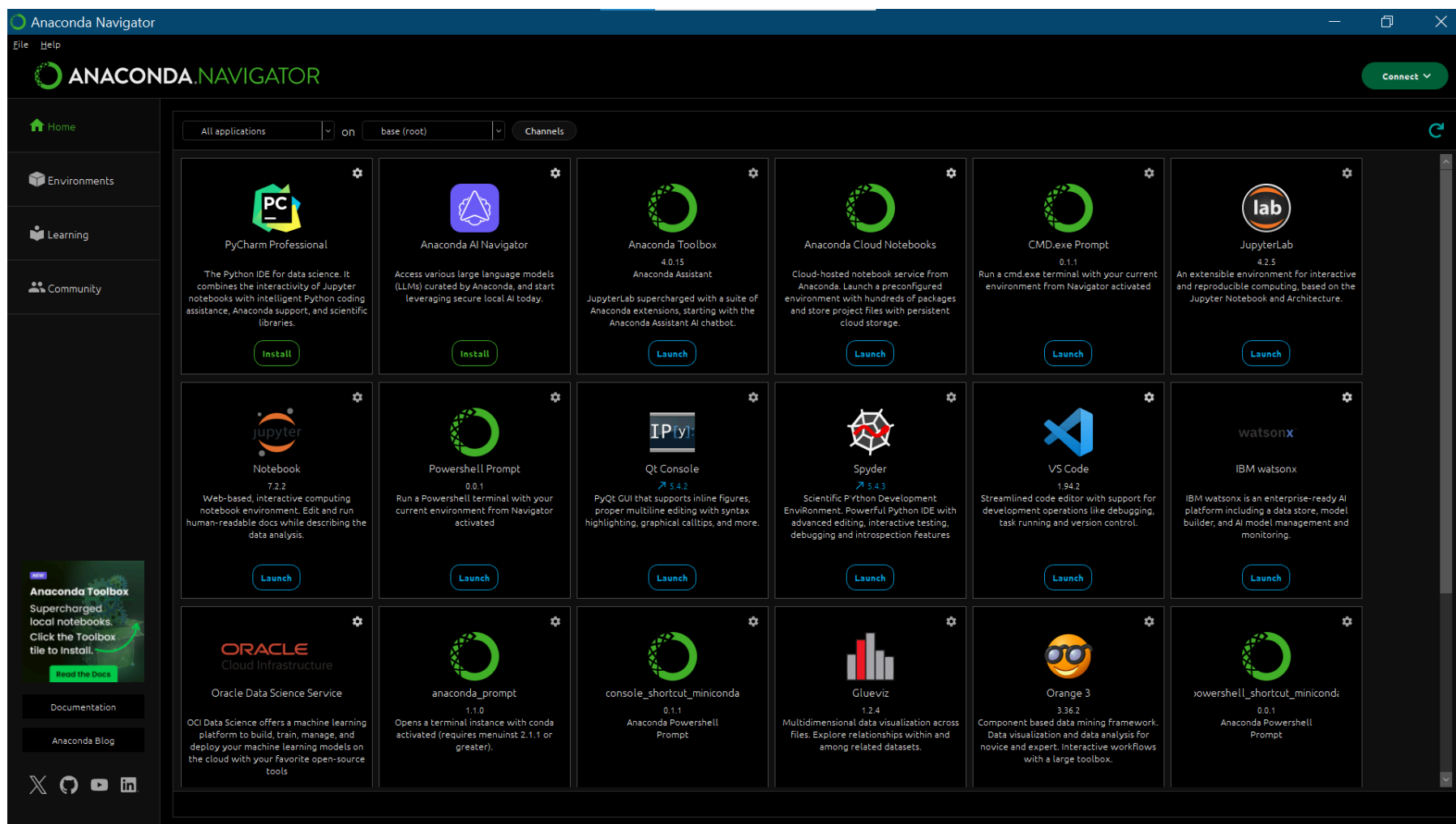
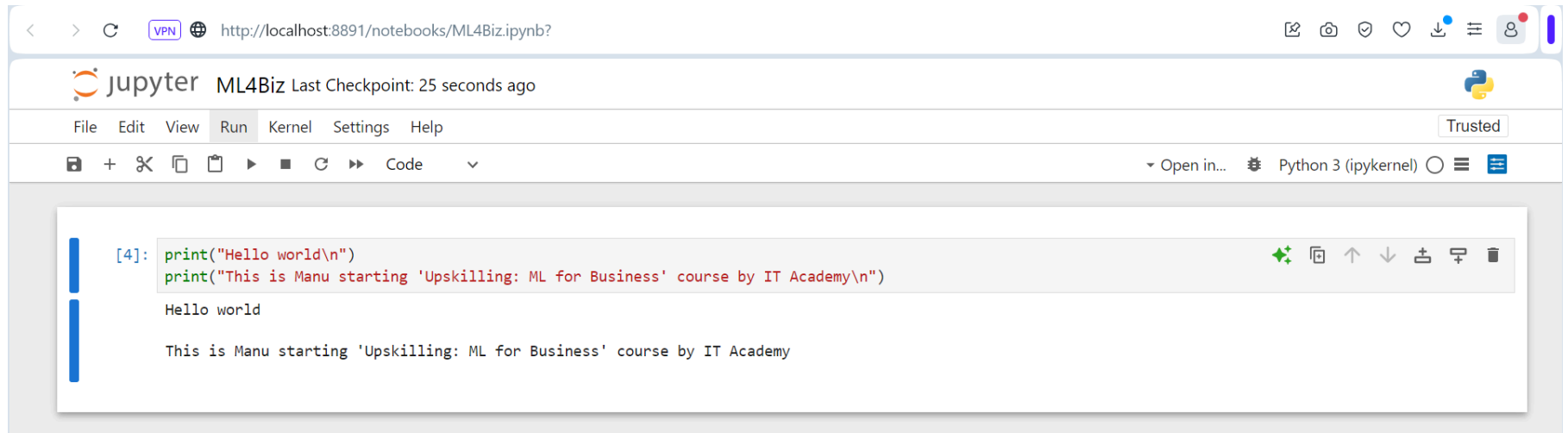


# Upskilling: Machine Learning For Business

## Sprint 0: Instal·lació i configuració de l'entorn de treball per ML

- **Exercici 1.** Instal·la el programa Anaconda amb Python 3, i Jupyter Notebook.





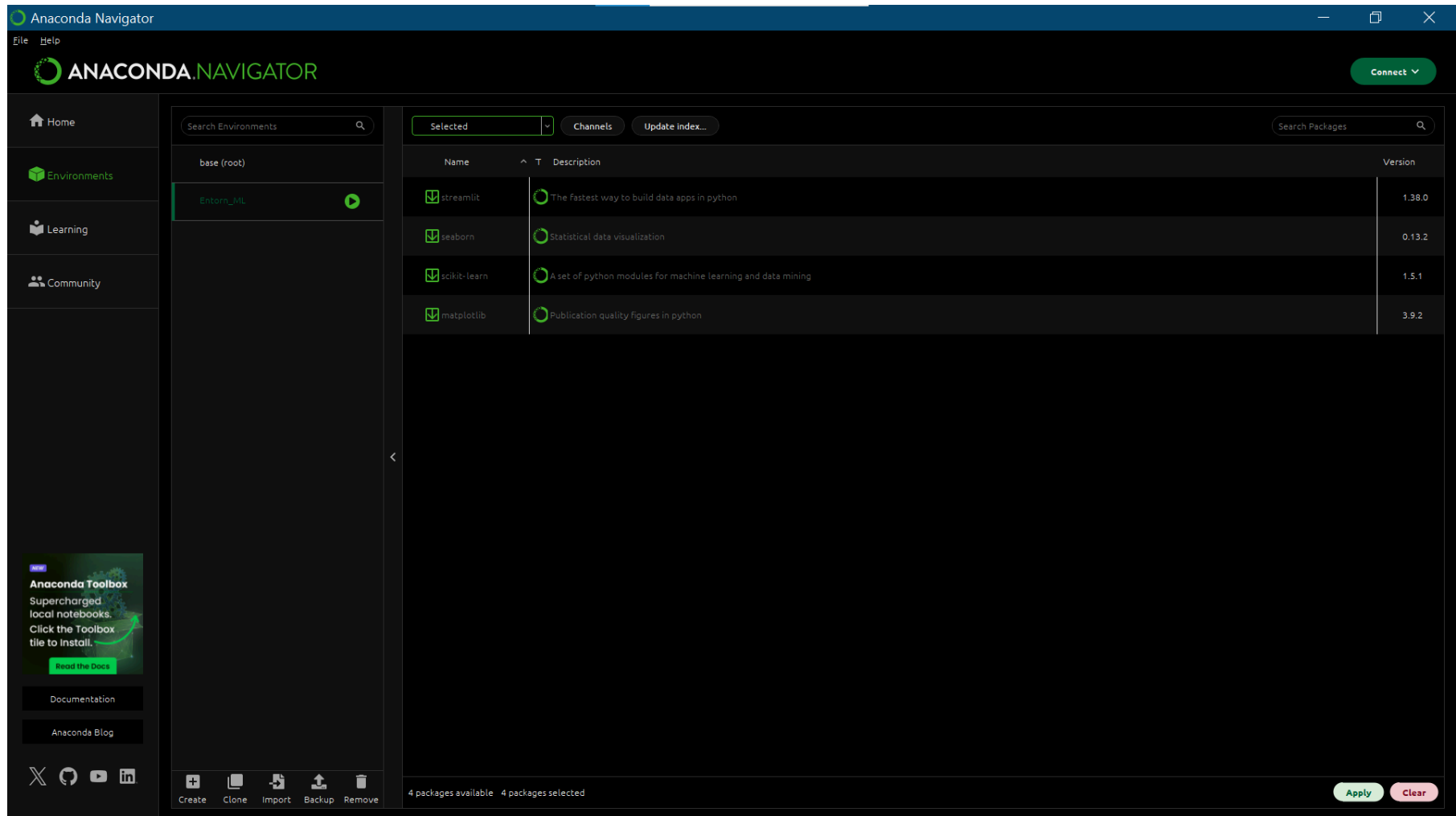
```
[4]: print("Hello world\\n")
      print("This is Manu starting 'Upskilling: ML for Business' course by IT Academy\\n")

Hello world

This is Manu starting 'Upskilling: ML for Business' course by IT Academy
```

- **Exercici 2.** Crea un entorn virtual a Anaconda amb el nom "entorn\_ML" que contingui les llibreries necessàries per a ML.

- Entorno 'entorn\_ML' creado
- Librerías 'NumPy' y 'Pandas' instaladas de una en una
- Resto de librerías necesarias para ML instaladas conjuntamente, según captura adjunta



Verificar sobre Jupiter NB en VSCode que las librerías ML están instaladas y que versión está instalada.

**NOTA.** Según he leído en el foro del curso no hay inconveniente en utilizar VSCode como entorno de desarrollo en lugar del entorno virtual creado en Anaconda.

```
In [8]: import numpy as np
import pandas as pd
import sklearn as skl
import matplotlib as plt
```

```
import seaborn as sns
import streamlit as stl

print("\nNumPy Version:", np.__version__)
print("\nPandas Version:", pd.__version__)
print("\nScikit-Learn Version:", skl.__version__)
print("\nMatplotlib Version:", plt.__version__)
print("\nSeaborn Version:", sns.__version__)
print("\nStreamlit Version:", stl.__version__)
```

NumPy Version: 1.24.3

Pandas Version: 1.5.3

Scikit-Learn Version: 1.3.0

Matplotlib Version: 3.7.1

Seaborn Version: 0.12.2

Streamlit Version: 1.39.0

**- *Exercici 3.* Utilitzant Jupyter Notebook executa alguns càlculs senzills, a la vegada que et familiaritzes amb el llenguatge Markdown.**

### Operaciones aritméticas simples

In [11]: `3 + 4 * 5 - 6`

Out[11]: 17

### Potencia

In [13]: `3 ** 2`

Out[13]: 9

### Division vs. division entera

```
In [15]: 8 / 5, 8 // 5
```

```
Out[15]: (1.6, 1)
```

## Módulo

```
In [17]: 12 % 5
```

```
Out[17]: 2
```

## Operaciones con variables

```
In [19]: num = 4 + 5  
num + 6
```

```
Out[19]: 15
```

- **Exercici 4.** Prova de crear títols, llistes, canviar l'estil de la lletra o afegir imatges dins del Notebook.

Librerías necesarias para el curso:

- **NumPy:** cálculo numérico
- **Pandas:** manipulación y análisis de datos
- **Scikit-learn:** gestión de modelos Machine Learning
- **Matplotlib:** visualización básica de datos
- **Seaborn:** visualización de gráficos avanzados
- **Streamlit:** creación de webs interactivas

*Otros ejemplos de estilos, imagenes, listas y titulos disponibles en el resto de apartados de este notebook.*

- **Exercici 5.** Crea un repositori a GitHub amb el nom "Projecte Machine Learning"

The screenshot shows a web browser window displaying the GitHub repository page for 'Projecte-Machine-Learning' by user 'ManuC-023'. The browser's address bar shows the URL 'https://github.com/ManuC-023/Projecte-Machine-Learning'. The repository page includes a header with the repository name, a search bar, and navigation tabs for Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings. Below the header, there are statistics for the repository: 1 branch (main), 1 commit, 0 stars, 0 forks, and 1 watcher. The main content area shows the 'Initial commit' by 'ManuC-023' 1 minute ago, with a file named 'README.md'. The README content is visible, showing the repository title 'Projecte-Machine-Learning' and its description: 'Repository for the course 'Machine Learning for Business' by IT Academy'. On the right side, there are sections for 'About', 'Releases', and 'Packages', all indicating no releases or packages published.

Enlace al repositorio GitHub del curso: <https://github.com/ManuC-023/Projecte-Machine-Learning>

- **Exercici 6.** Puja el fitxer de Jupyter Notebook al teu repositori de GitHub.

The screenshot shows a web browser window displaying the GitHub repository page for 'Projecte-Machine-Learning' by user 'ManuC-023'. The browser's address bar shows the URL 'https://github.com/ManuC-023/Projecte-Machine-Learning'. The repository is public and has 0 stars, 0 forks, and 1 watch. The repository contains two files: 'ML4BIZ.ipynb' (committed 1 minute ago) and 'README.md' (initial commit, 18 minutes ago). The README file is selected and displays the title 'Projecte-Machine-Learning' and the description 'Repository for the course 'Machine Learning for Business' by IT Academy'. The right sidebar shows the repository's metadata, including the README, activity, stars, watching, forks, releases, and packages.

ManuC-023 / Projecte-Machine-Learning

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

Projecte-Machine-Learning Public

main 1 Branch Tags

Go to file

Code

ManuC-023 'ML for Business' by ITAcademy 401c52d · 1 minute ago 2 Commits

ML4BIZ.ipynb	'ML for Business' by ITAcademy	1 minute ago
README.md	Initial commit	18 minutes ago

README

# Projecte-Machine-Learning

Repository for the course 'Machine Learning for Business' by IT Academy

About

Repository for the course 'Machine Learning for Business' by IT Academy

Readme

Activity

0 stars

1 watching

0 forks

Releases

No releases published

[Create a new release](#)

Packages

No packages published