INTRODUCTION TO PROGRAMMING

Python Crash Course

Abdelrahman A. Mohamed

Where we are going

Abdelrahman A. Mohamed

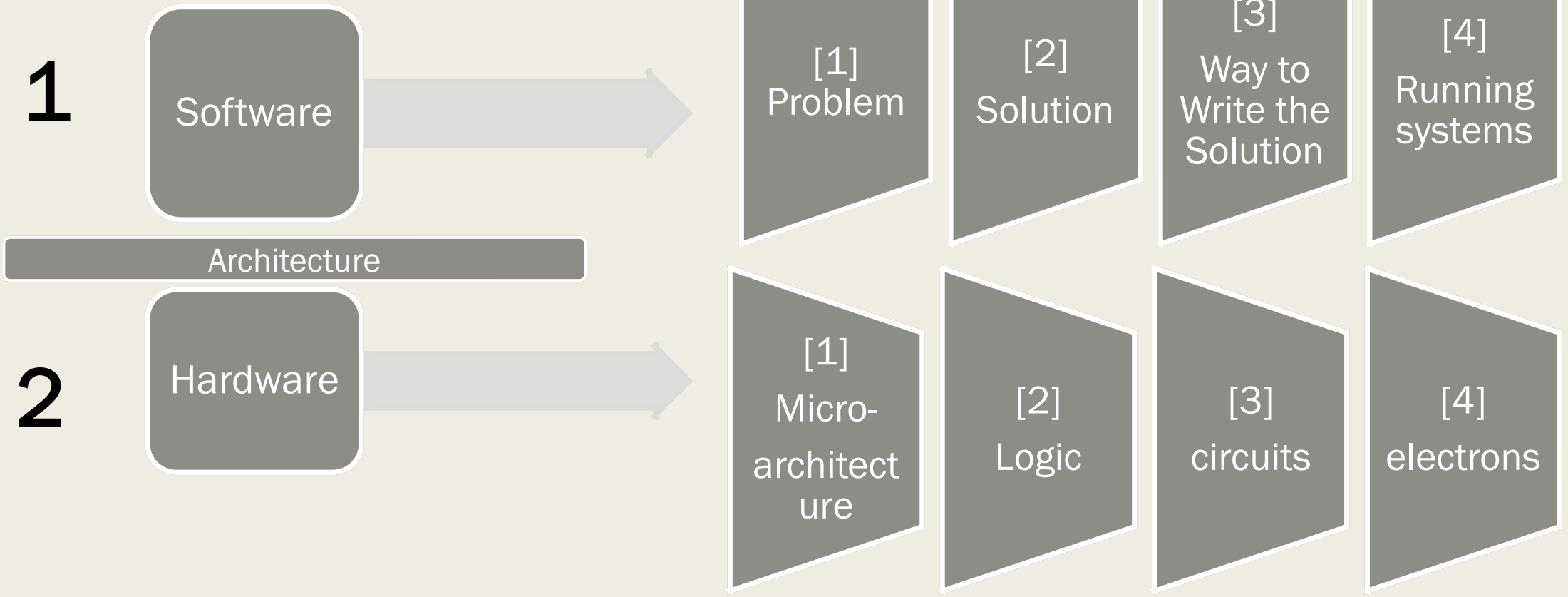
Main Headlines.

- What is the programming ?
- Why we need it ?
- Human languages
- Programing languages
- From the problem to solution
- Why Python?
- Python **I**ntegrated **D**evelopment **E**nvironment **IDE** (Anaconda Environment)
- Frist Program

What is the programming and Why we need it ?

- To Answer these Questions We Need to understand how the computer is working ?

- **Main two components of the computer**



Human Languages

- How to say **how are you?** in different languages by different ways ?

Arabic	English	Turkish	Spanish
كيف حالك	How are you	Nasılsın	Cómo estás ?
ايه الاخبار	What’s up	Nasıl gidiyor	¿Qué tal?
كيفك	How it’s going	Ne haber	Cómo andas ?

As we see above, we can do the same thing by different ways

So ,Can we do this with programming ?

Programming languages

-Make a Program to print “hello world” three times .

```
In [4]: for i in range(3):
            print("hello world")

hello world
hello world
hello world
```

```
In [5]: i=0
        while(i<3):
            print("hello world")
            i+=1

hello world
hello world
hello world
```

```
In [6]: print("hello world")
        print("hello world")
        print("hello world")

hello world
hello world
hello world
```

and that prove there is no unique solution for any problem may there is more than one solution

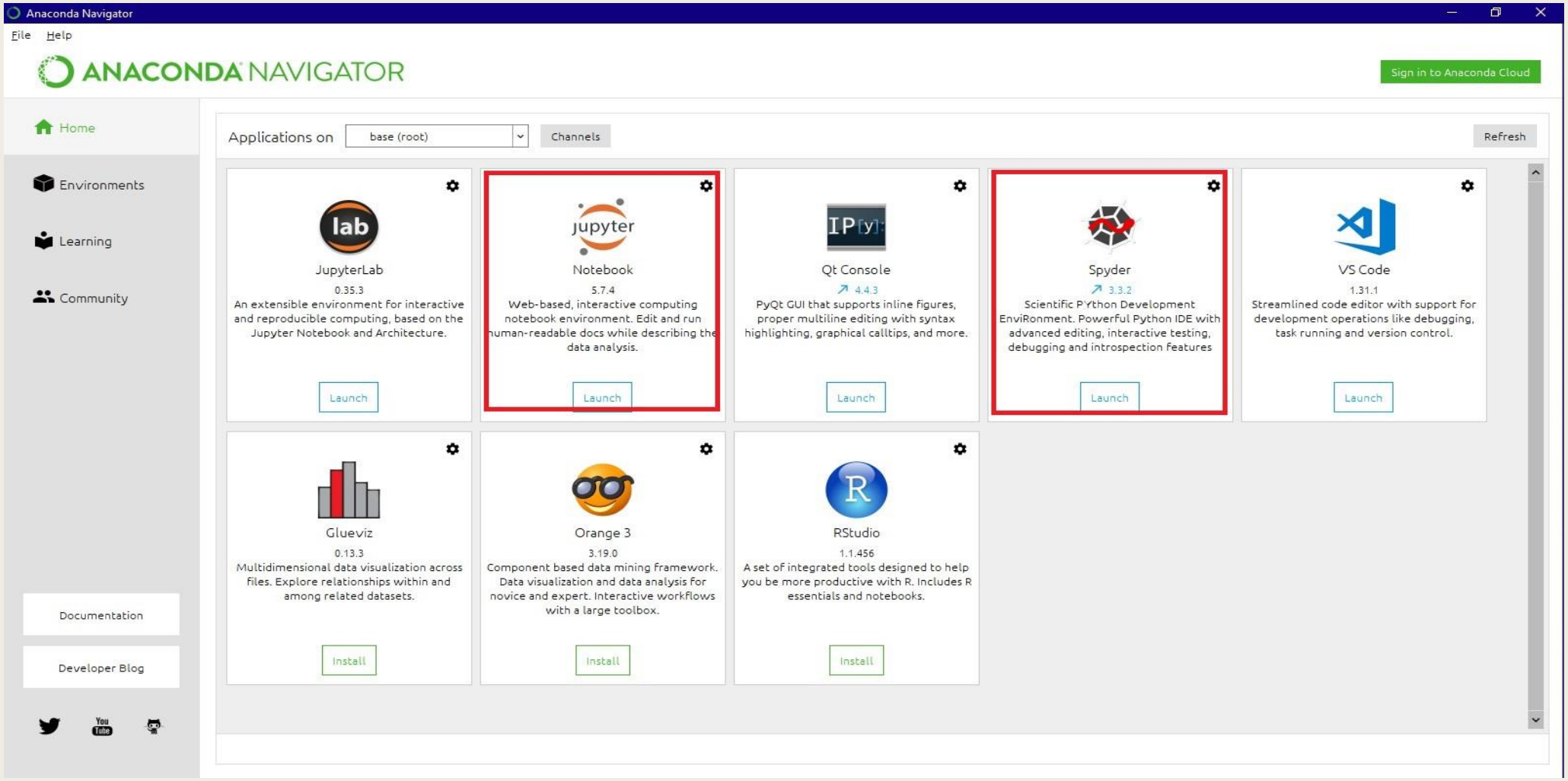
Why Python?

- Open Source
- Easy to learn
- A lot of libraries
- Web programming
- Windows applications
- Mobile applications
- Security
- Artificial intelligence

Worldwide, Dec 2018 compared to a year ago:

Rank	Change	Language	Share	Trend
1	↑	Python	25.36 %	+5.2 %
2	↓	Java	21.56 %	-1.1 %
3	↑	Javascript	8.4 %	+0.0 %
4	↑	C#	7.63 %	-0.4 %
5	↓↓	PHP	7.31 %	-1.3 %
6		C/C++	6.4 %	-0.4 %
7		R	4.01 %	-0.3 %
8		Objective-C	3.21 %	-0.9 %
9		Swift	2.69 %	-0.7 %
10		Matlab	2.06 %	-0.3 %

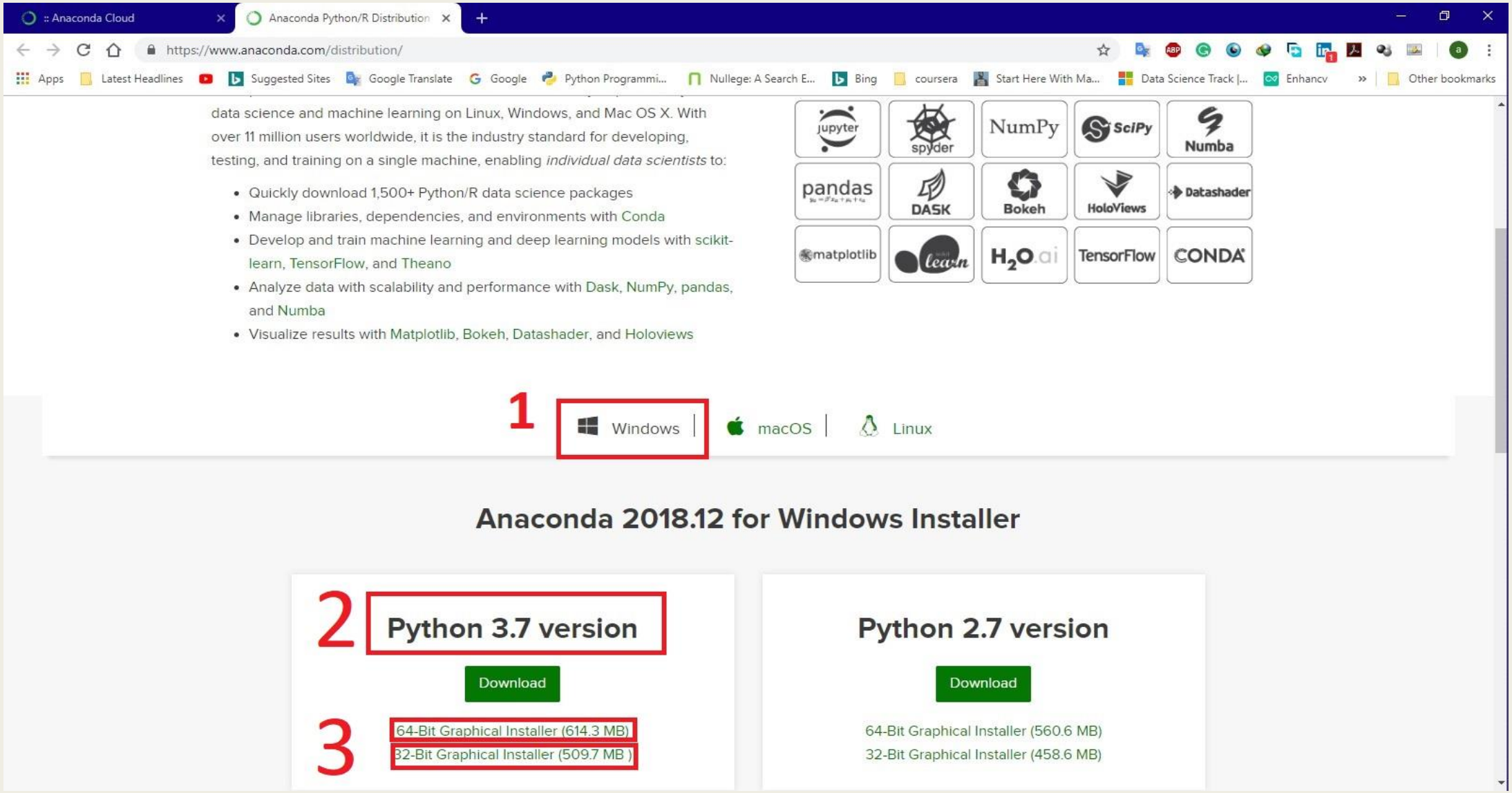
Python IDE and Anaconda Environment.



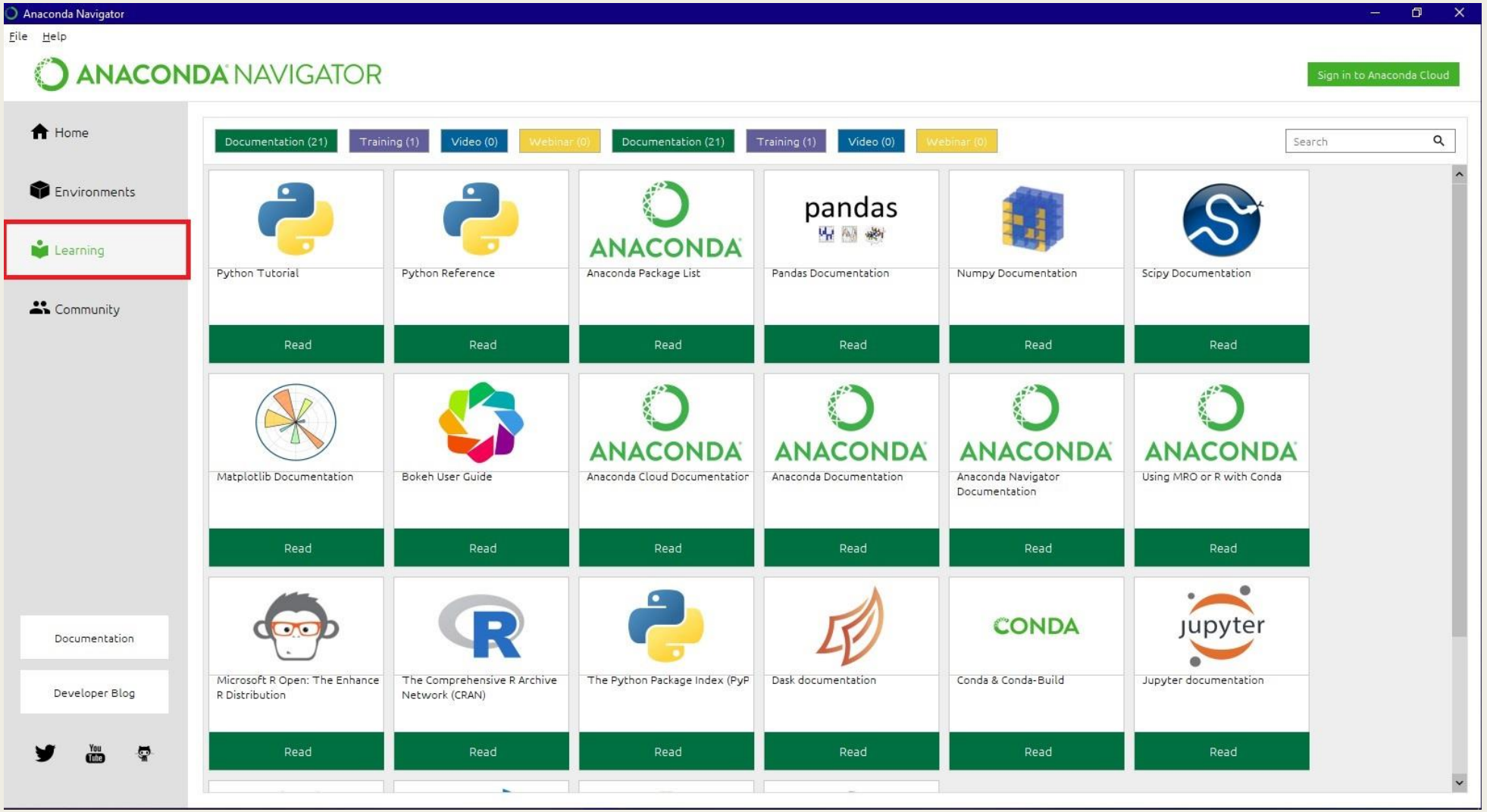
Download link:

https://www.anaconda.com/distribution/

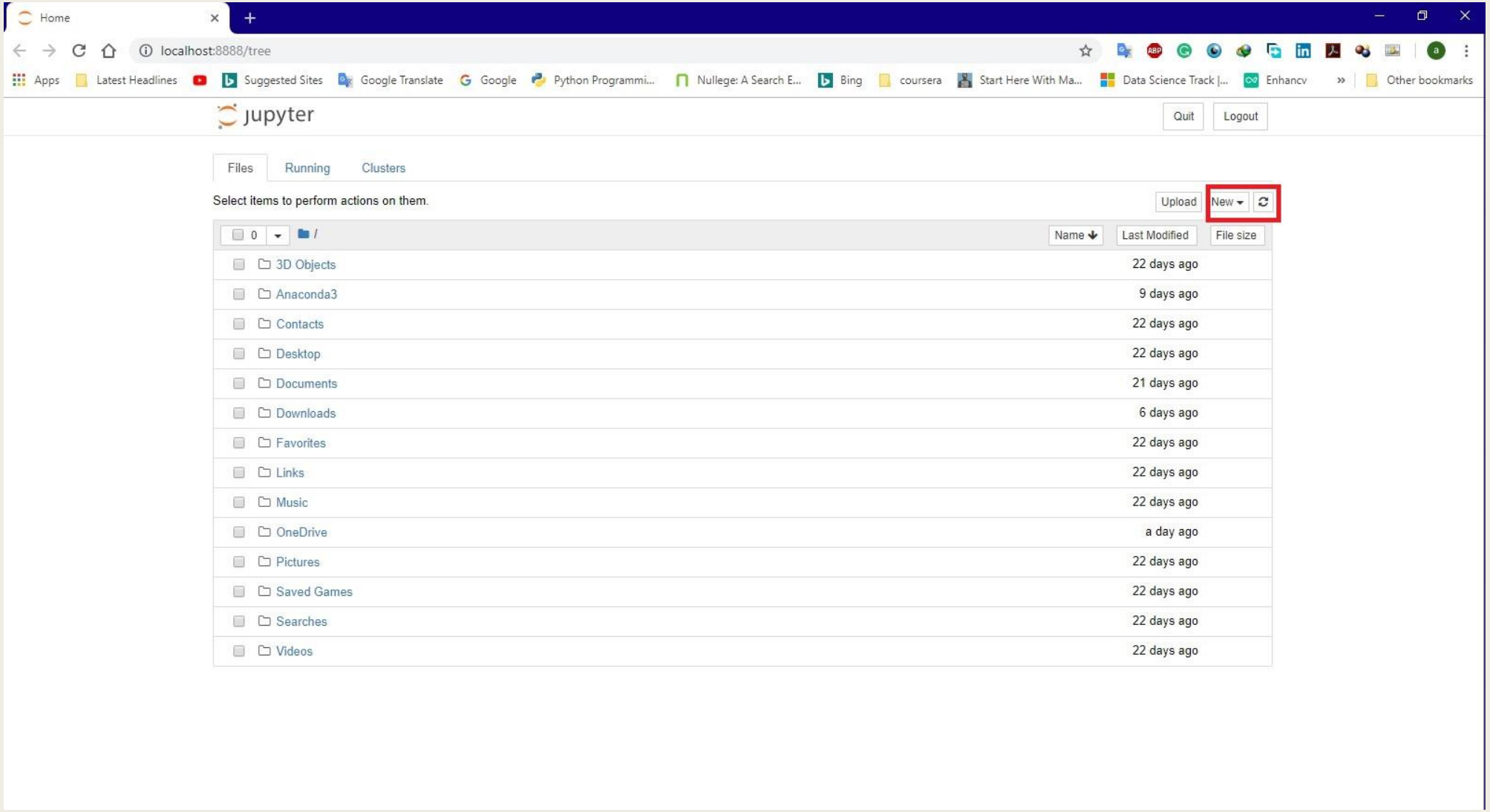
How to download ?



Anaconda Environment.



Jupyter Notebook



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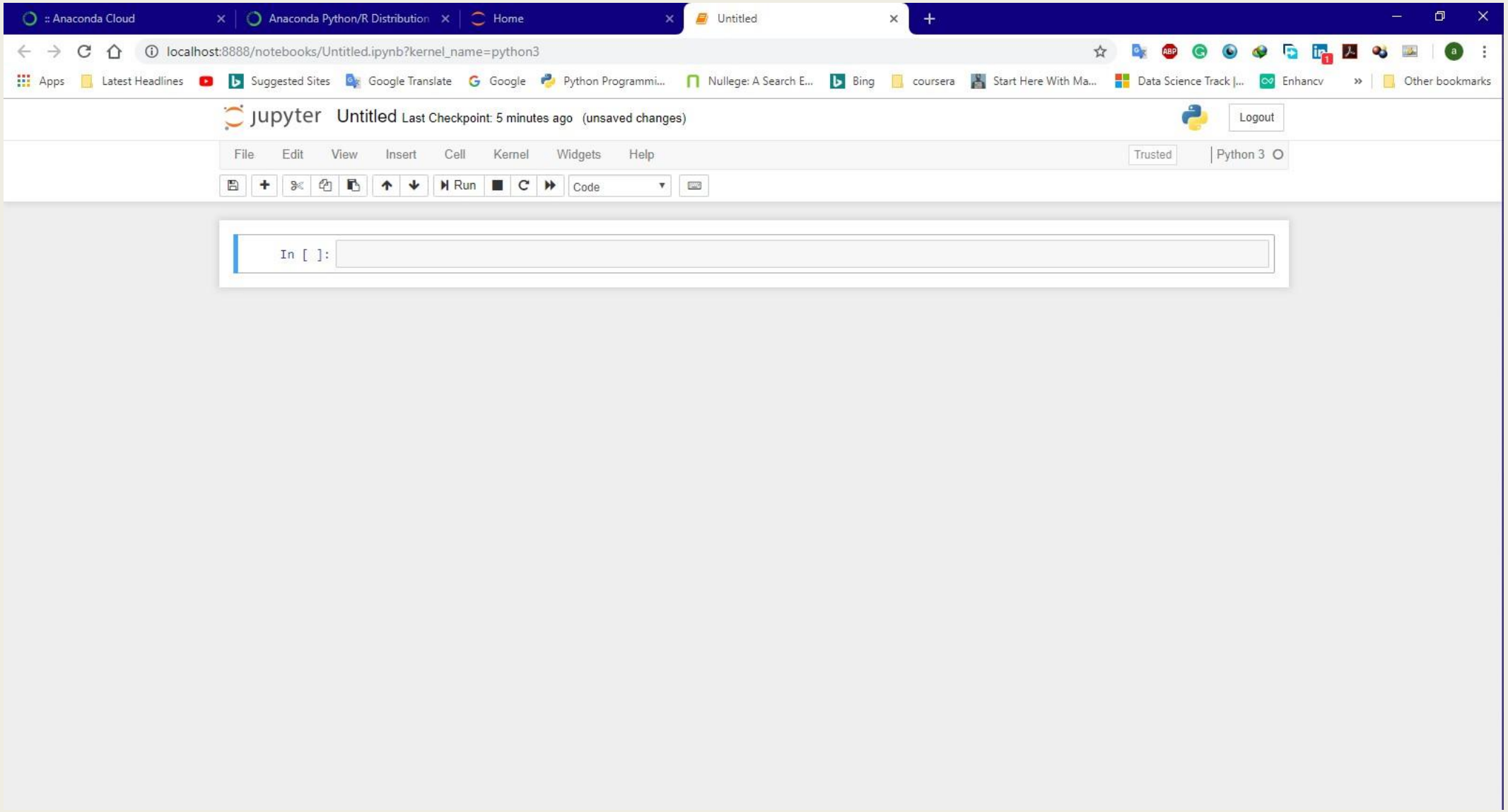
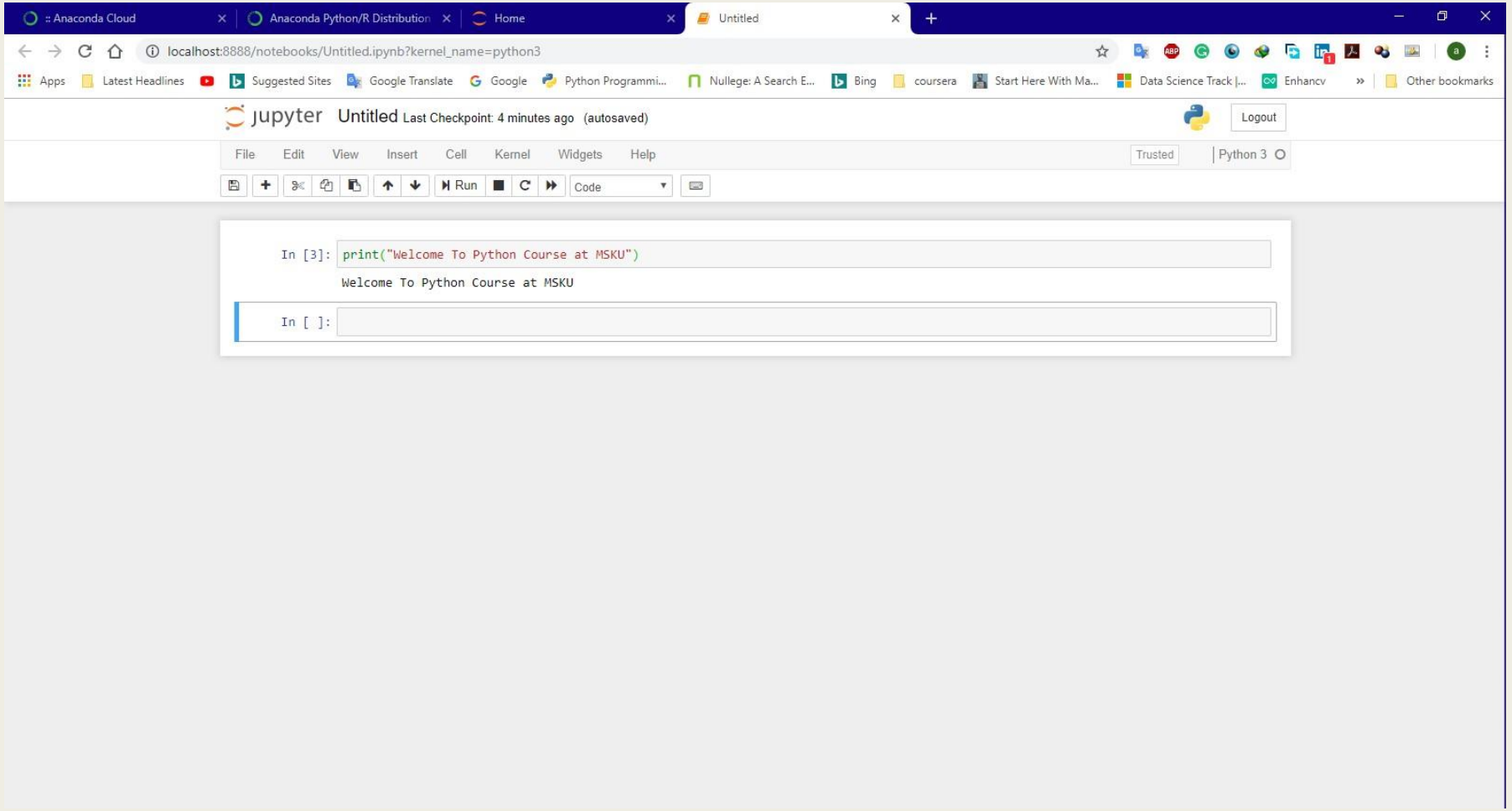
Our Frist program