

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

# What is Python?

Of course, I am not talking about snake.

Python is a clear and Powerful object-oriented programming language, comparable to Perl, Ruby, Scheme, Java or C#.



Already in love with Python <3



YAHOO!



You Tube



Quora

mozilla

# Hello World! :)

► Just one line:-

```
print("Hello World")
```

# Hello World



## C++

```
#include<iostream>
using namespace std;
int main()
{
    cout << "Hello World!";
    return 0;
}
```



## Java

```
public class HelloWorld
{
    public static void main(String[] args)
    {
        System.out.println("Hello World");
    }
}
```



## Python

```
print("Hello World")
```

# Swap Numbers

## C++

```
#include <iostream>
using namespace std;
int main()
{
    int x = 5, y = 10, temp;
    temp = x;
    x = y;
    y = temp;
    return 0;
}
```

## Java

```
class SwapNumbers
{
    public static void
    main(String args[])
    {
        int x = 5, y = 5, temp;
        temp = x;
        x = y;
        y = temp;
    }
}
```

## Python

```
x = 5
y = 10
x,y = y,x
```

The Google logo is centered at the top of the slide, rendered in its characteristic multi-colored font.A horizontal search bar with a light blue border and a small magnifying glass icon on the right side.

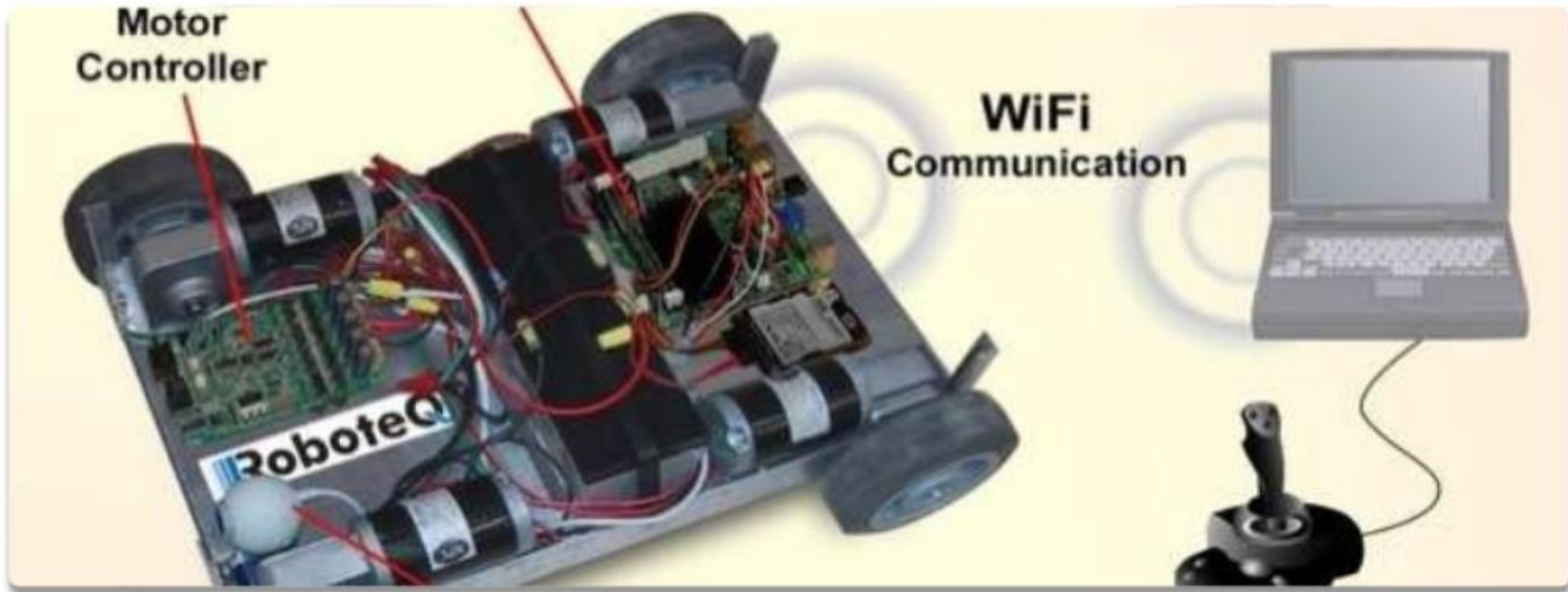
Google Search

For Training Models

## Google

Python provides the power behind the most popular search engine in the world – Google. The programming language can handle the traffic and computing needs of the search engine and its connected apps.

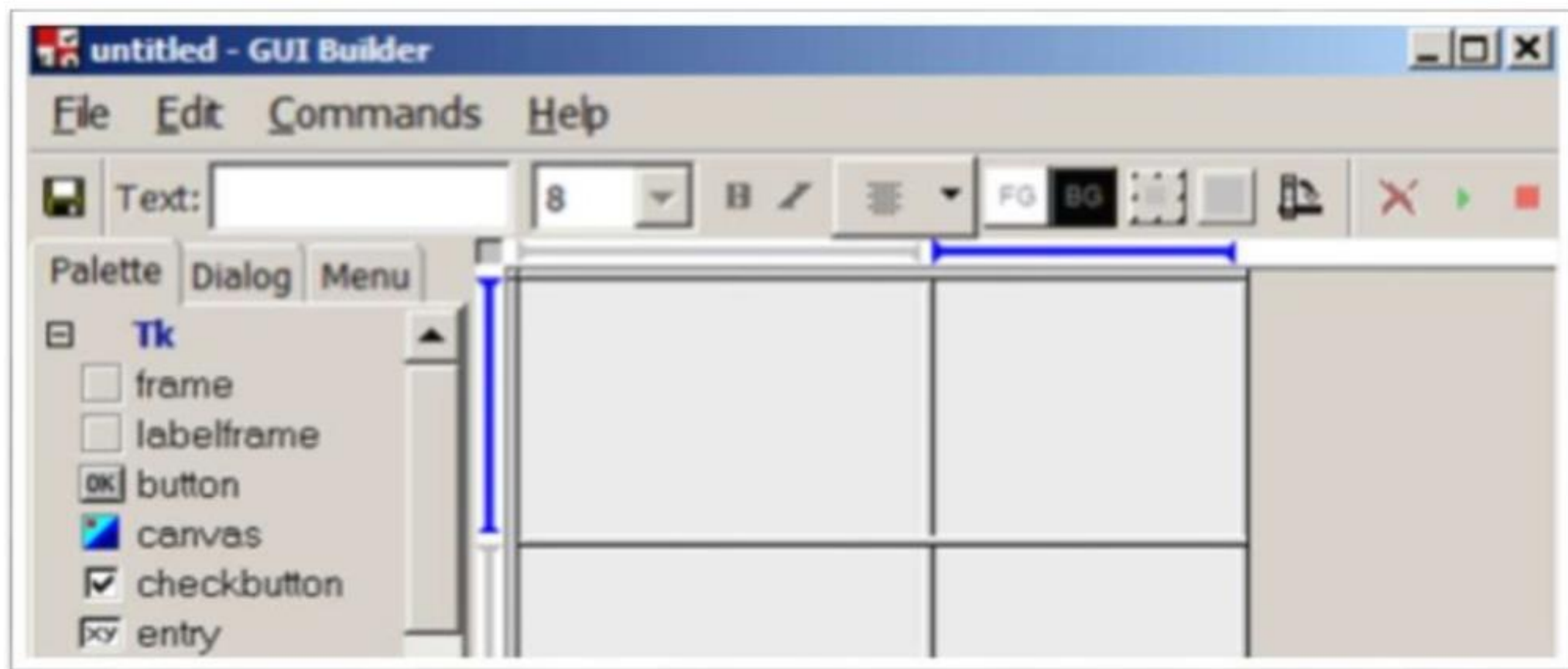




## Robotics

Raspberry pi can be used as a **brain** to the **robot** to perform various actions and to react to the environment and the coding on a **Raspberry pi** can be done using python.





## GUI development

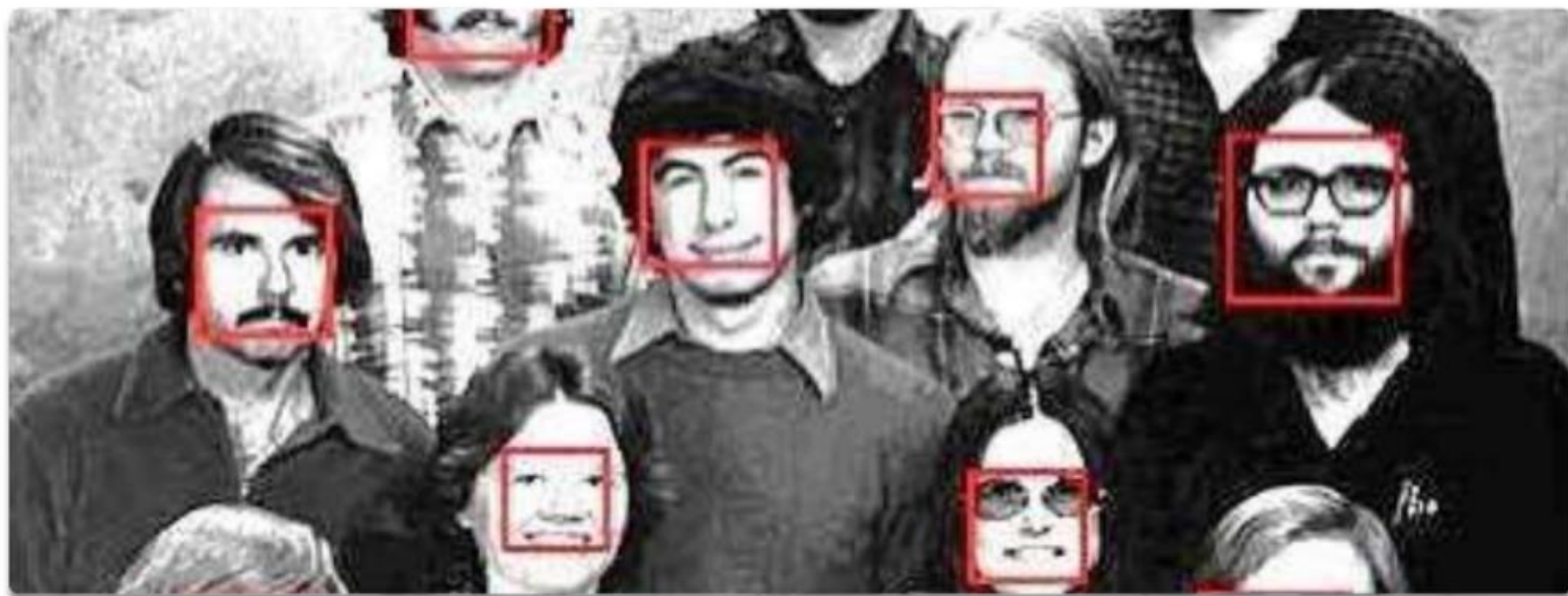
To develop a **cross-platform desktop application** python can be used. Python has modules **Tkinter**, **PyQt** to support it.

# Applications of Python

- ▶ Web Crawler
  - ▶ Using library's like BeautifulSoup
- ▶ Web Development
  - ▶ Using Libraries like Django and Flask
- ▶ Data Structures and Algorithms
  - ▶ Using Libraries
- ▶ Plugin
- ▶ Library

# Some more Applications of Python

- ▶ Data Science
  - ▶ Got some knowledge of Machine Learning and AI? You can implement some algos to build your own.
- ▶ Networking
  - ▶ Implement some protocols SMTP, FTP, HTTP
- ▶ Cryptography
  - ▶ Encrypt and decrypt library, something like, RSA, RC4, DES
- ▶ Computer Vision



## Computer Vision

You can do interesting things such as **Face detection**, **Color detection** using **Opencv** with **python**

# A few more

- ▶ Artificial Intelligence
  - ▶ SimpleAI
  - ▶ EasyAI
- ▶ Games
  - ▶ Pygame, A few are very popular: Pixel Man, Too many Troopers

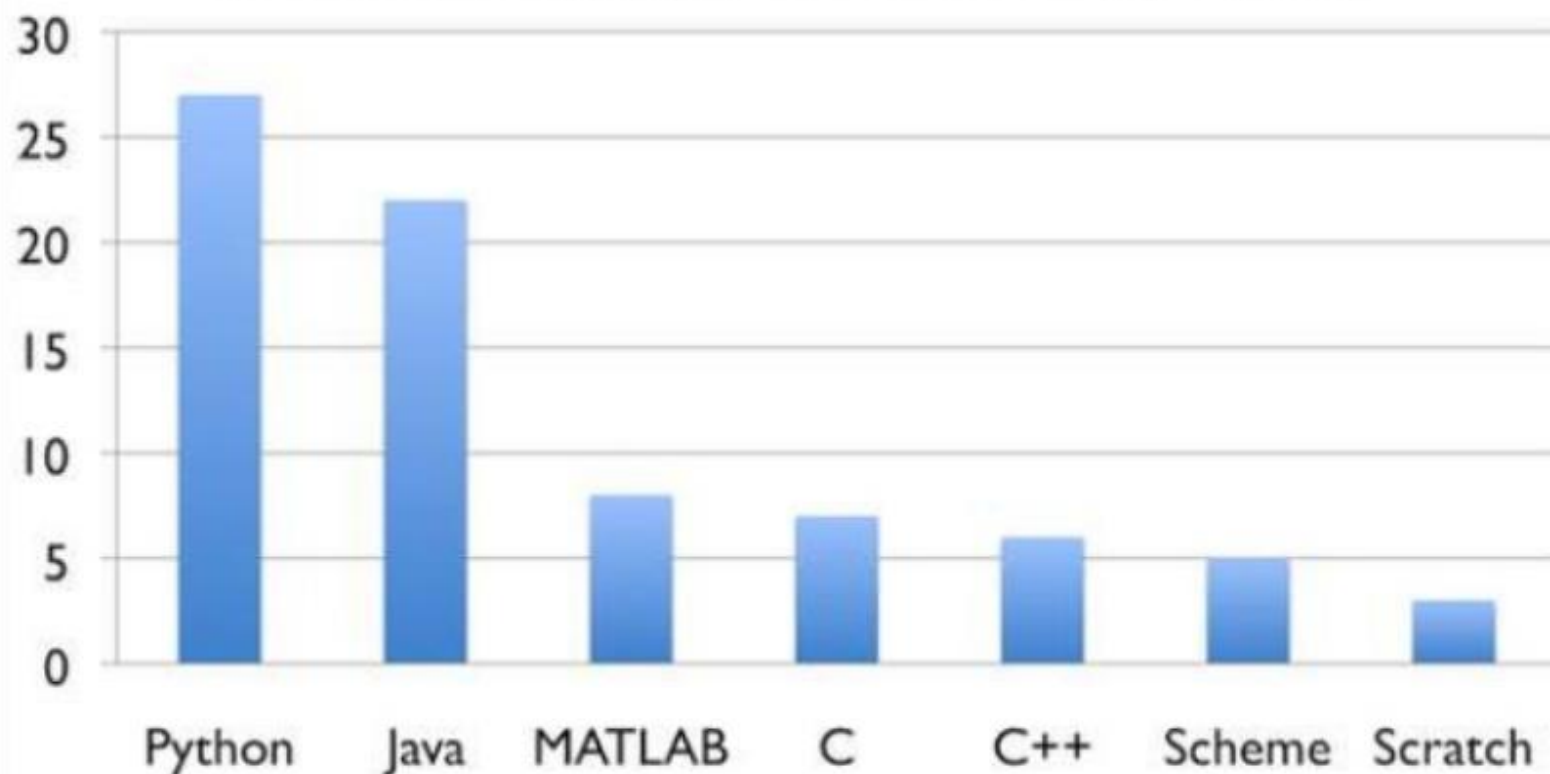




# Pygame

A video game being developed by using Pygame

Number of top 39 U.S. computer science departments  
that use each language to teach introductory courses



Analysis done by Philip Guo ([www.pgbovine.net](http://www.pgbovine.net)) in July 2014, last updated 2014-07-29



# What Is Anaconda Navigator?



**Anaconda Navigator** is a desktop graphical user interface included in Anaconda that allows you to launch applications and easily manage conda packages. It also provides much greater advantages in the data science platform

## What Is Conda?



**Conda**, the Anaconda's own package manager, is used for updating anaconda and its packages. Conda is an open source package and environment management system that runs on Windows, macOS and Linux. Conda quickly installs, runs and updates packages and their dependencies

## What Is Jupyter Notebook?

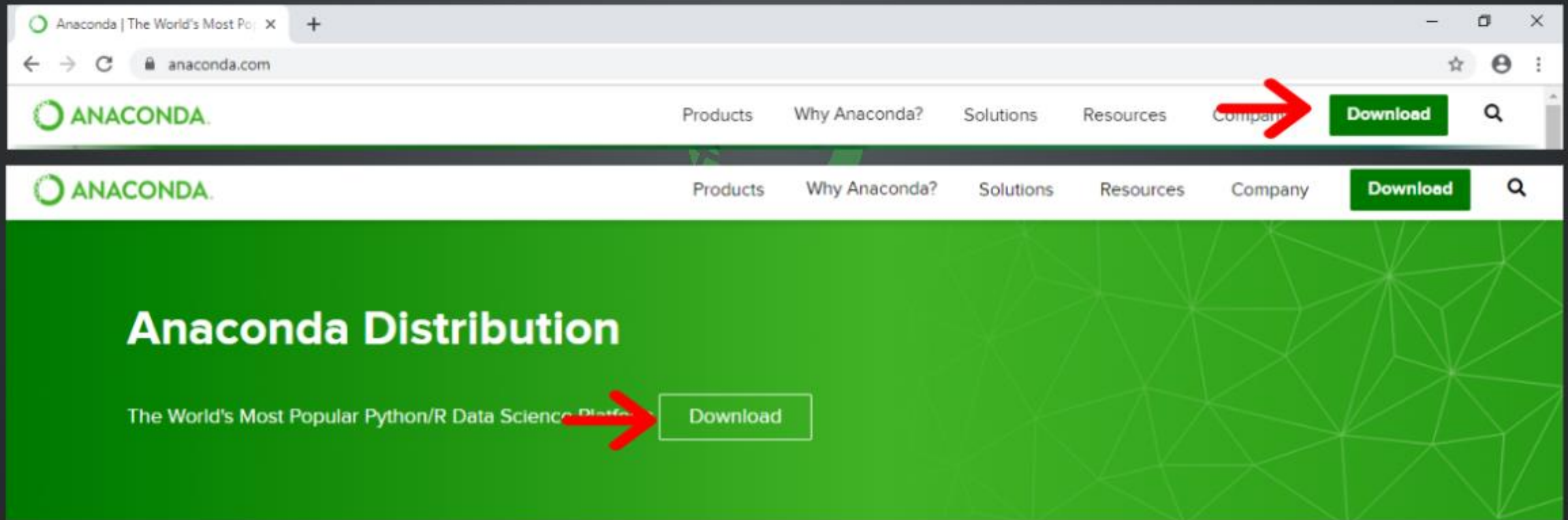


The **Jupyter Notebook** is a web application that allows you to create and share documents that contain live code. Also to create and edit documents that display the result of Python code



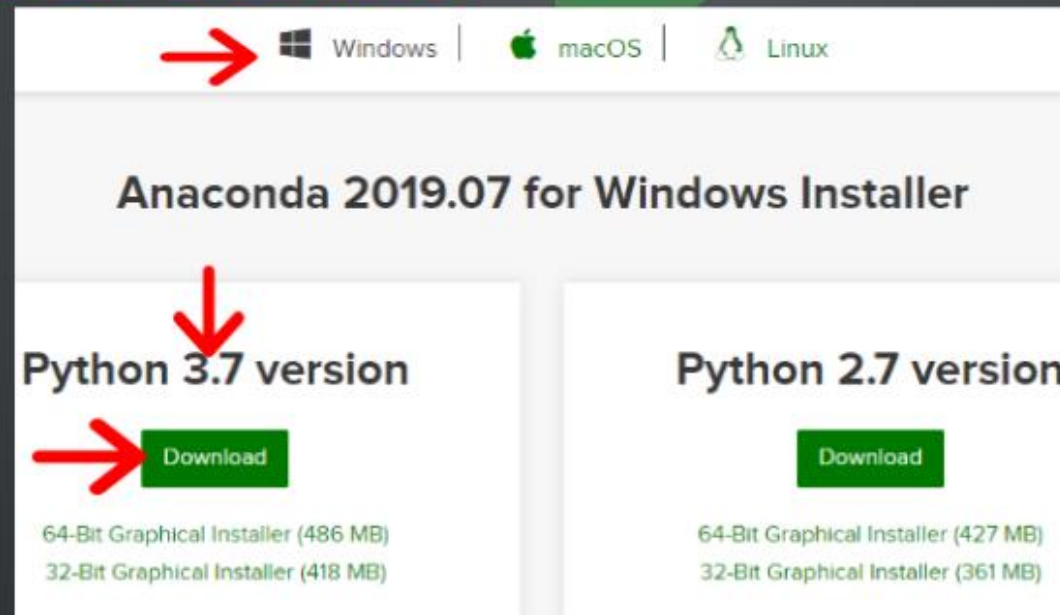
# How To Download?

- Visit the official site for the anaconda navigator here: <http://www.anaconda.com>
- Hit on the download button on the top right corner



# How To Download?

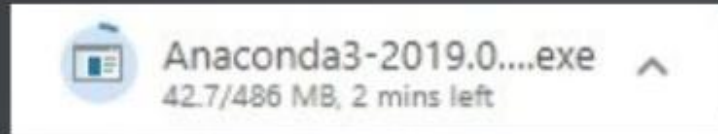
- Scroll down to the download menu
- Select your relevant OS (highlighting with **black**)  
be cautious while choosing this (In my case Windows)
- Here you witness two options **Python 3.7 & Python 2.7**
- Select **Python 3.7** & click on the **Green "Download"** box





# How To Download?

- The download will begins
- Open the file. It will start download



- Check all check boxes and click **Next** on every scenario , click on "**Just Me(Recommended)**" at this point

