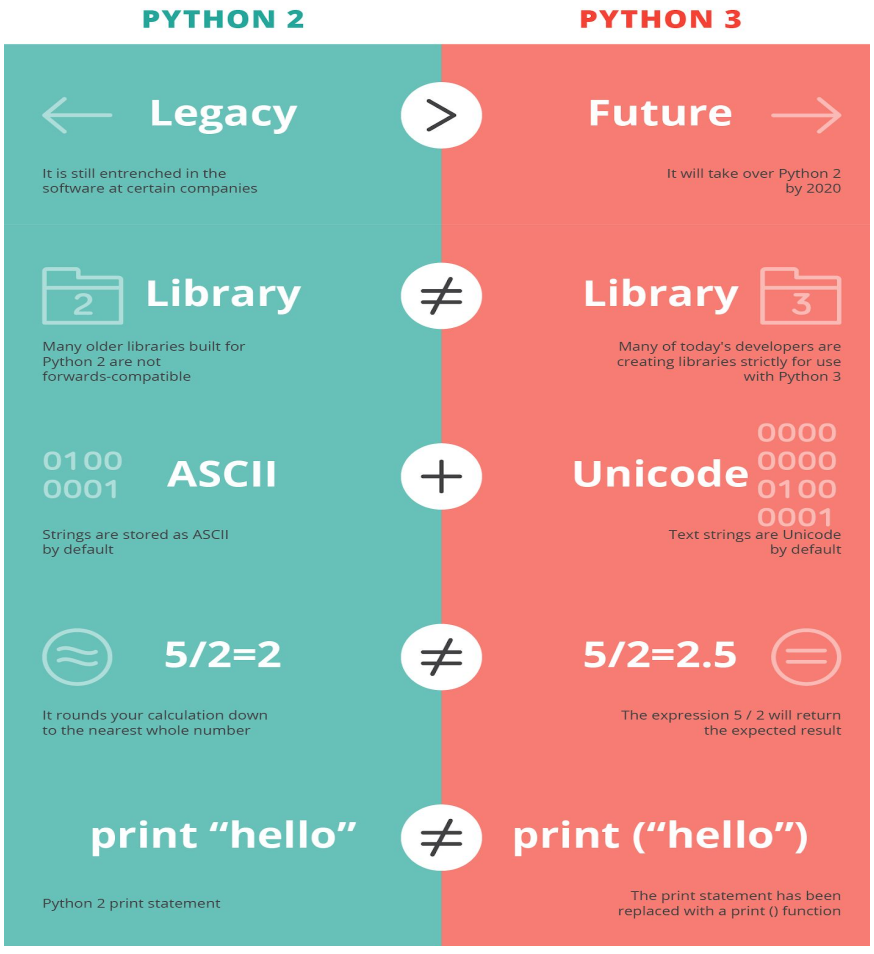
Python is cool.

Python

- Python is a **high-level**, **interpreted scripting language** developed in the late 1980s.
- Python 2.0 was released in 2000.
- Python 3.0 was released in 2008.
- Python 2.7 will officially “retire” and will not be maintained from Jan 1, 2020.


PYTHON 2
PYTHON 3
Legacy
>
Future
It is still entrenched in the software at certain companies
It will take over Python 2 by 2020
2
Library
≠
Library
3
Many older libraries built for Python 2 are not forwards-compatible
Many of today's developers are creating libraries strictly for use with Python 3
0100 0001
ASCII
+
Unicode
0000 0000 0100 0001
Strings are stored as ASCII by default
Text strings are Unicode by default
5/2=2
≠
5/2=2.5
It rounds your calculation down to the nearest whole number
The expression 5 / 2 will return the expected result
print "hello"
≠
print ("hello")
Python 2 print statement
The print statement has been replaced with a print () function

So, why learn python?

1. It's Simple and Easy to Learn!

Open Source

High Level

Interpreted

Large Community

C

C (Gcc 6.3)

```c
#include <stdio.h>

int main(void) {
    printf("Hello World!")
    return 0;
}
```

ERROR

Python3

PYTH 3.6 (Python 3.6)

```python
print("Hello World!")
```

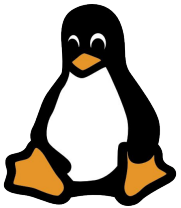
CORRECT


Why does Python live on land?
Because it's above C-level.
WWW.THEFASTLESSTREX.COM

Python or C?

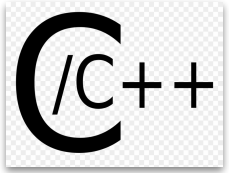
2. Portable and Extensible

Mac OS



Linux

Windows

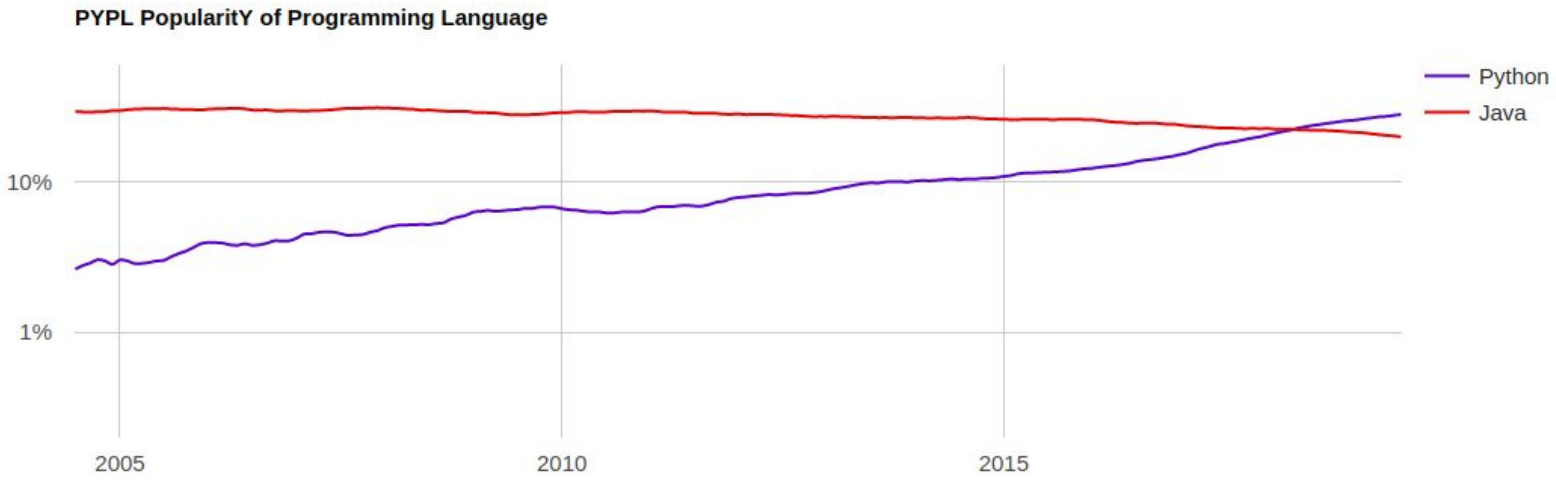


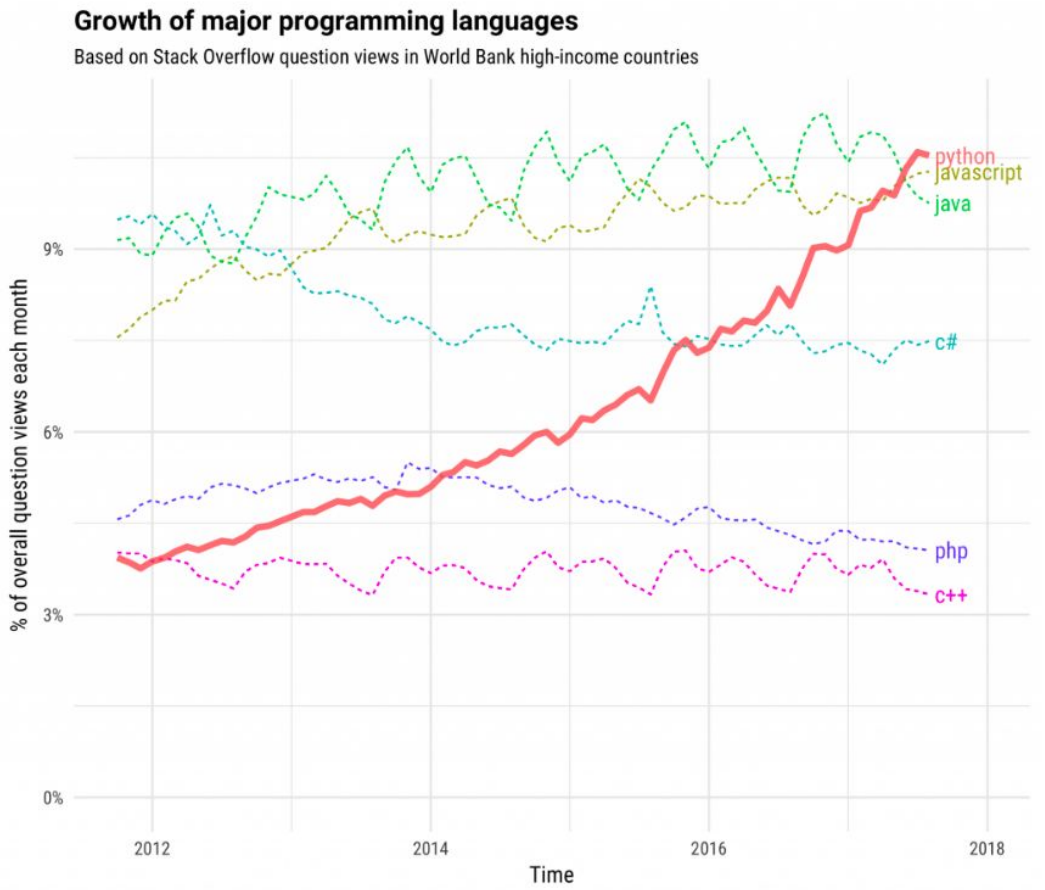
3. It's popular!

Worldwide, Jul 2019 compared to a year ago:

Rank	Change	Language	Share	Trend
1		Python	28.24 %	+4.4 %
2		Java	19.99 %	-2.1 %
3		Javascript	8.55 %	+0.1 %
4	↑	C#	7.43 %	-0.5 %
5	↓	PHP	6.92 %	-1.1 %
6		C/C++	5.99 %	-0.1 %
7		R	4.14 %	+0.0 %
8		Objective-C	2.82 %	-0.6 %
9		Swift	2.52 %	-0.3 %
10		Matlab	1.85 %	-0.4 %

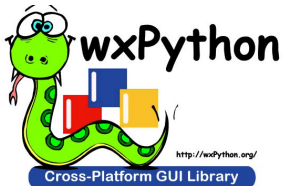
Source: PYPI (PopularitY of Programming languages Index)

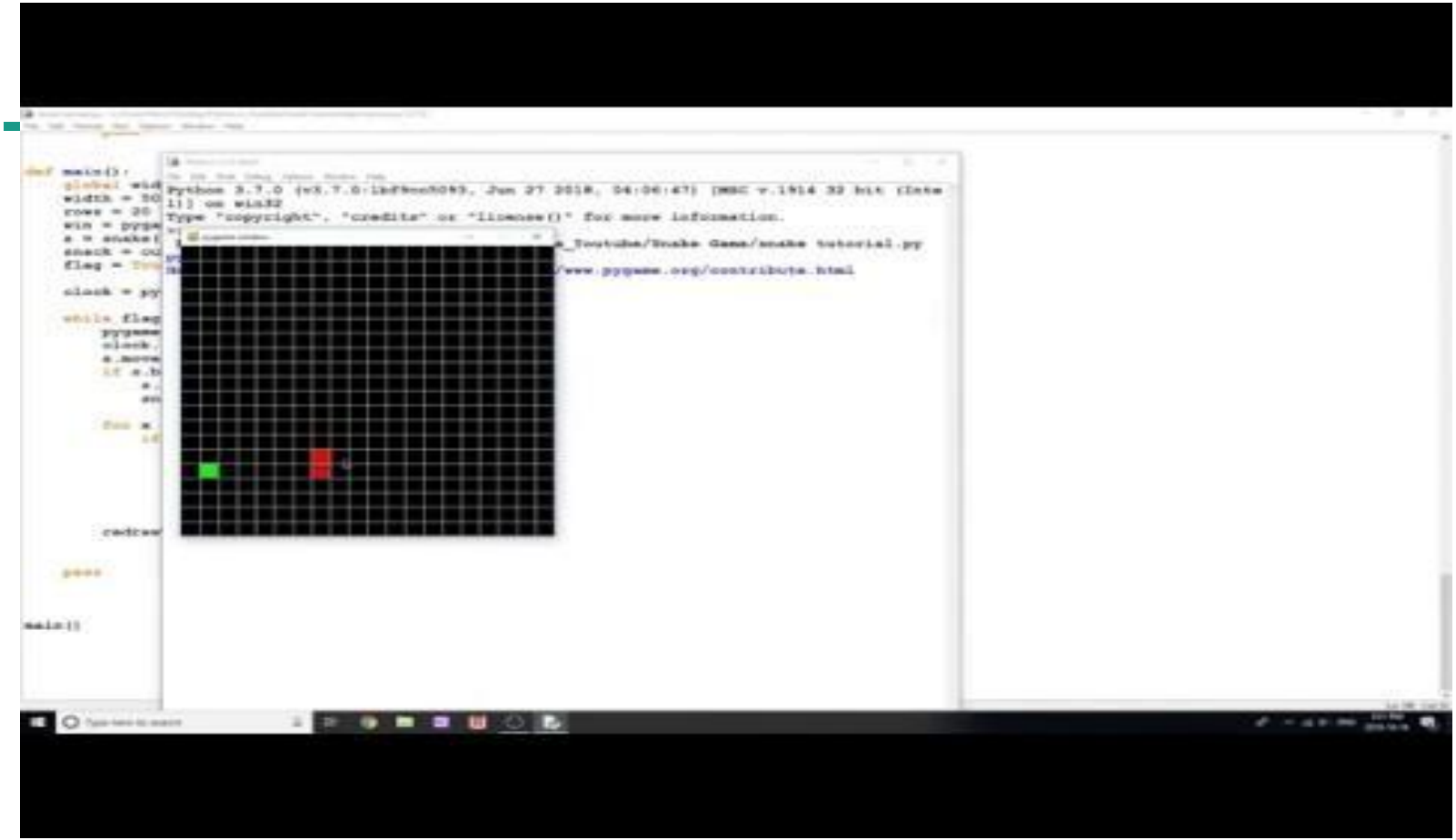

PYPL PopularitY of Programming Language
Python
Java
10%
1%
2005
2010
2015


Growth of major programming languages
Based on Stack Overflow question views in World Bank high-income countries
% of overall question views each month
9%
6%
3%
0%
2012
2014
2016
2018
Time
python
javascript
java
c#
php
c++

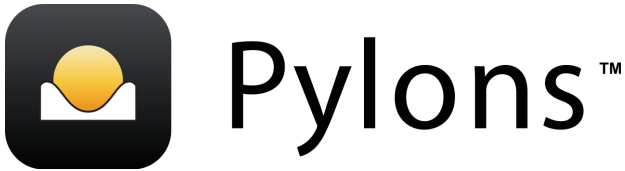
4. Computer Graphics

- Graphical User Interface
- Desktop Applications
- Game Development




Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:06:47) [MSC v.1914 32 bit (Intel)] on win32
Type "copyright", "credits" or "license()" for more information.
/www.pygame.org/contribute.html

5. Web Development



6. Data Analysis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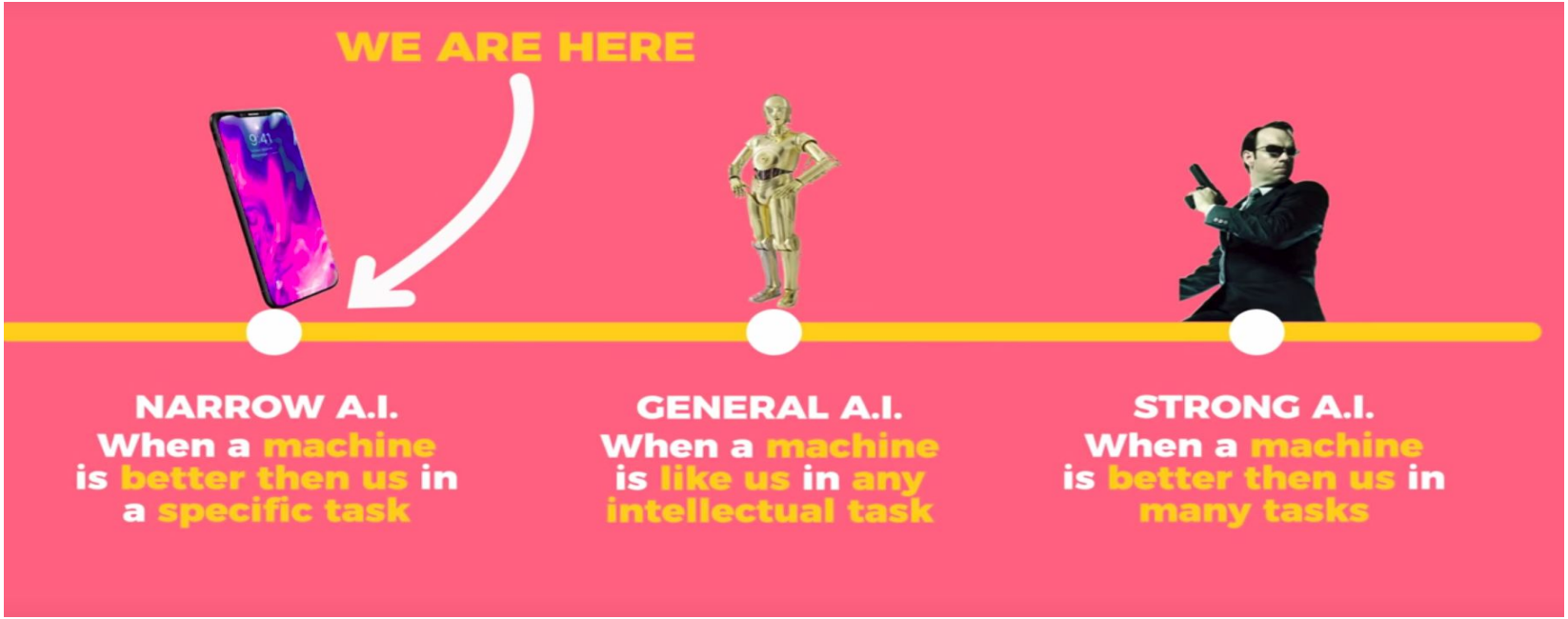
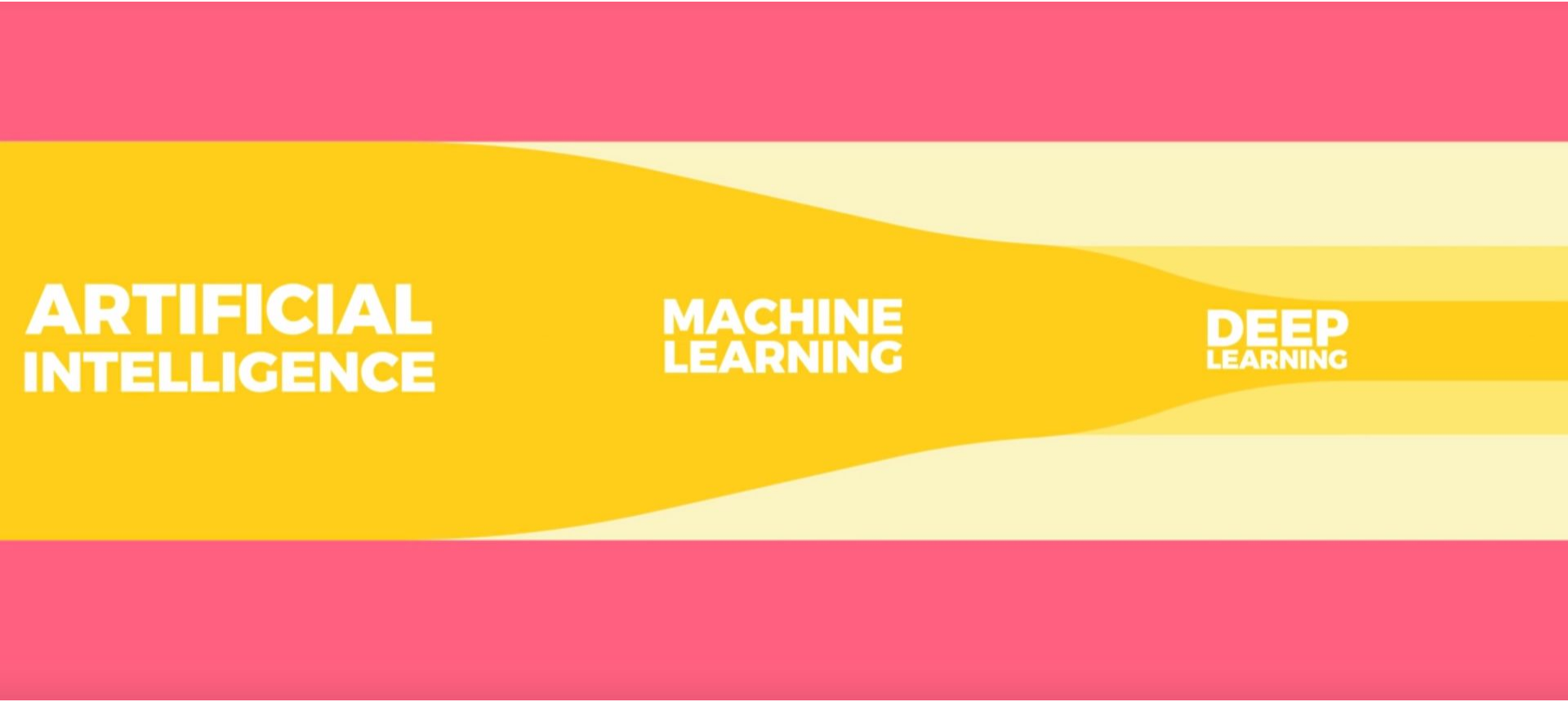
YOUR PRIVATE INFO

7. Artificial Intelligence and Machine Learning




ARTIFICIAL
INTELLIGENCE
MACHINE
LEARNING
DEEP
LEARNING

Python libraries for ML

To Summarize...

- It is very easy to learn
- It has a large community
- Has a host of libraries.
- These libraries in turn propel a wide variety of applications.


WRITES 10 LINE
PYTHON SCRIPT
ELIMINATES THE
NEED FOR 5 JOBS

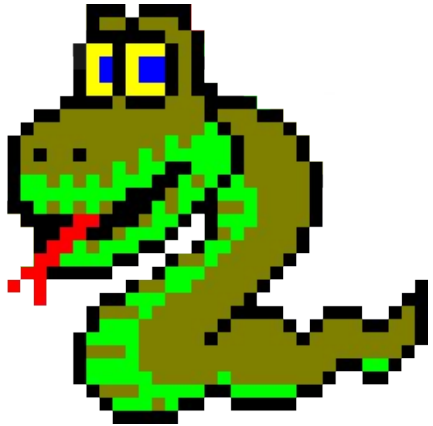
How to get started?

1. Search “Best resources to learn python”.

   Youtube Playlists, Codecademy, Courses on Udemy, Coursera, Udacity etc.

   Suggestion: Go for project-based learning.

2. Real Python Blog (Highly Recommended)



Hence, python is cool!

Thank You :)

Quiz Time!

1. Find the output.

```
a = 4.5

b = 2

print (a//b)
```

a) 2.25
b) 2
c) 2.0
d) 2.2

2. Find the output.

```
a = "Python is Cool!"
b = 13
print (a + b)
```

a) Python is Cool!13
b) Error
c) Python is Cool!(printed 13 times)
d) Python is Cool!M

3. Find the output.

```
a = "Python is Cool!"
b = 13
print a + b
```

a) Python is Cool!13
b) Error
c) Python is Cool!(printed 13 times)
d) Python is Cool!M