

Python Beta 101

Python and Numbers



AL NAFI,
A company with a focus on education,
wellbeing and renewable energy.

Forty Hadith on the importance of Knowledge, learning and Teaching.

Hadith # 20 Learning

Abu Hurairah (may Allah be pleased with him) narrated, the Messenger of Allah (peace be upon him) said:

“Indeed! Acquiring knowledge is done through learning.

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And anyone who cares about good, it will be given him, and anyone who protects himself from evil, he will be saved from it.”

(ad-Daraqutni, in al-Ifrad; al-Khatib)

Writing an essay in different languages



PYTHON

JAVA

Python and Numbers

There are two main number types in Python:

- Integers which are whole numbers.
- Numbers with decimals are known as floating point numbers.
- We will do advance math's in Python once students complete the 7 level of Math's as it relates to Data Science, ML, DL and AI at a later stage.

Assigning value to variables!!

In python we can assign values to variable names for reference purposes within our code

```
Allah_names = 99
```

Rules for variable names

- Names cannot start with a number.
- There can be no space in the name we MUST use _ for example
- muhammad faisal is incorrect as we can use muhammad_faisal which is correct.
- We cannot use any of these symbols
- : > < ? / " ' \ ! @ # \$ % ^ & ~ * as none of these symbols can be used when naming variables.

Best practice in Python

Best practice in Python is PEP 8

“Readability counts”

- The Zen of Python

Read the PEP 8

realpython.com/python-pep8

Rules for variable names

- Avoid using words that have special meaning in python like “list” and “str”
- Python uses Dynamic Typing which means we can reassign variables to different data types and its not a statically-Typed language.

Dynamic typing in Python

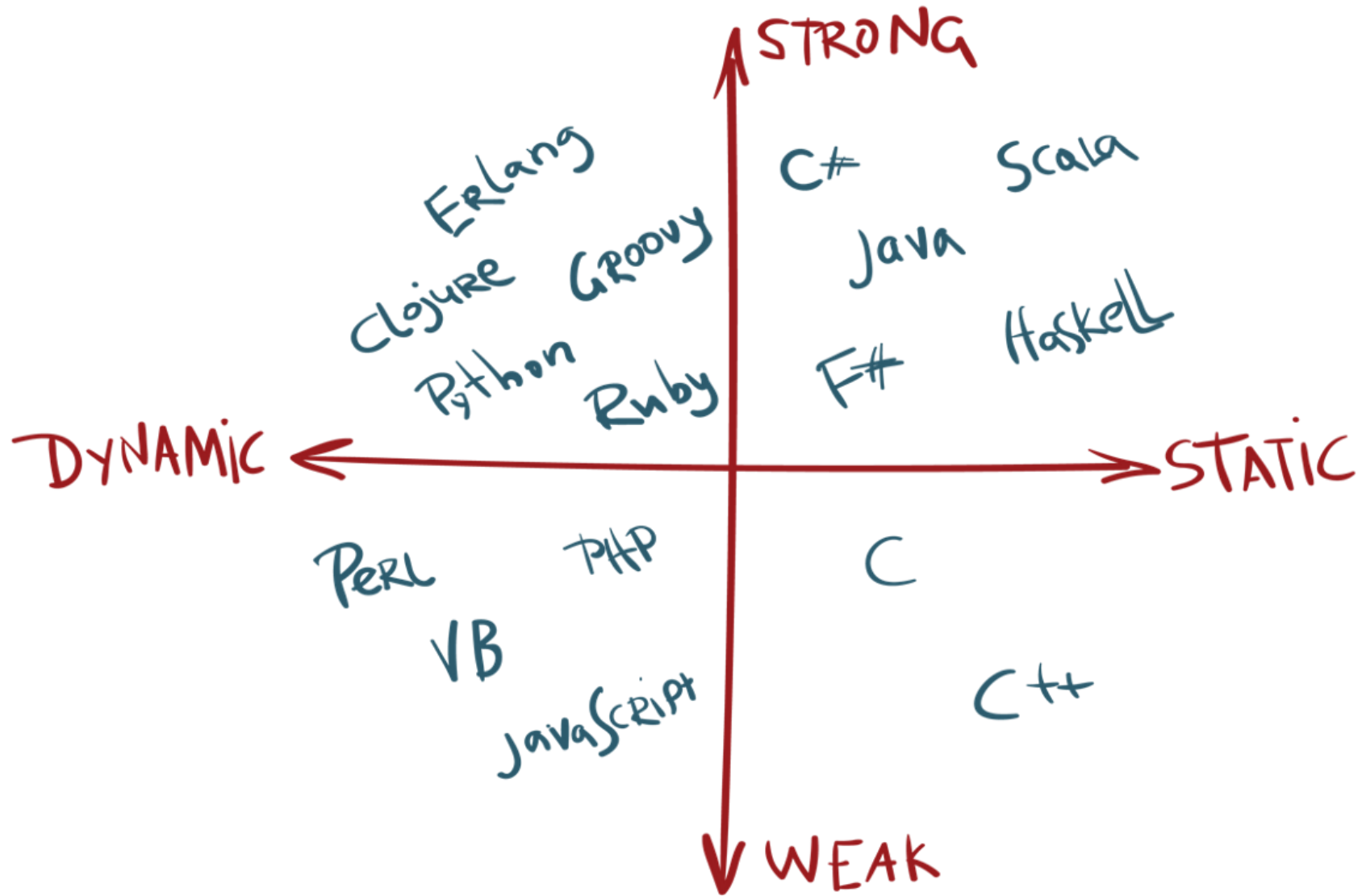
```
alnafi_portal = 1
```

```
alnafi_portal = ["cissp" , "oscp"]
```

Static typing in C++

```
int alnafi_portal = 1;
```

```
alnafi_portal = "cissp" ;
```



جزاك الله

To ask questions, please logon to the portal <https://alnafi.com/login/> and use your username and password. We will circle back to you in 2-3 business days inshAllah.