PYTHON

History :-

→ Guido Van Rossum.

1970's : BBC Comedy Series
  • Monty Python Flying Circus.

Advantages :-

- Simple / short. ✓
- Vast Application (Complete language)

    ↓ frontend   ↓ Backend   ↘ DS/DA

- Lots of libraries / Community Support.
- Open-source.

- Dynamic Typing

- Automatic Memory Management.

- Cross-platform Support.

    ↓ # Cython   ↓ # Jython   ↘ # Iron Python

→ High Level Datatypes :-
i) Lists   ii) Tuples   iii) Dictionaries   iv) Sets. ✓

For Swapping :-

$$\begin{bmatrix} a = 2 \\ a = 6 \end{bmatrix} \nearrow \hspace{-0.5em}\searrow \;, \begin{matrix} b = 6 \\ b = 2 \end{matrix} \end{bmatrix}$$

Java

(int) a = 2

b = 6

temp = a

a = b → a : 6

b = temp   b : 6

temp : 2

$\begin{pmatrix} a = 6 \\ b = 2 \end{pmatrix}$

Python

$\begin{bmatrix} a, b = 2, 6 \\ b, a = a, b \end{bmatrix}$

Java ← System. out. println (" ")

Pyth → Print ( )

0+1   len-1

Pallindrome :-   eg., MALAYALAM

Java

Str1 = " MALAYALAm "

length,

for :- 0 - (len - 1)

if str1[0] == str1[len-1],

coun..,

count = count + 1

len = len - 1

Python
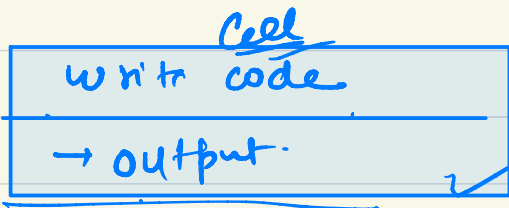
str1[::1] == str1[::-1]

Disadvantage :-

Python is a very high level language.
Which makes it slower.

Platform

* Learning | Development   **Deployment.**

- Anaconda ✓✓
  ↳ Spyder / ✓
- Jupyter ✓
  ↳ Notebook
      Cell
  | write code |
  | → output. |

  · ipynb

- Vscode ✓ || Spyder.
  (IDE)

  → deploy

  (· py)

- leetcode }
- Hackerrank }