Python vs Java

Data Flair

Python vs Java

Dimensions	Python	Java
Verbosity	Concise	Verbose
Performance	Interpreted, slower	Faster
Learning Curve	Easier than Java	Easy
Typing discipline	Dynamically-typed (duck-typing)	Statically-typed
Best for	Data Science, AI, Machine Learning	Embedded and cross-platform applicatio

Java		Python
It is the most fundamental language for multiple platforms.	USABILITY	Python has a more high-level programming language
Java is statically typed programming, making it faster.	SPEED	Python, on the other hand, is an interpreter is manually typed, makes it slower.
Java is object-oriented programming language.	LANGUAGE	Python is object-oriented with the advantage of scripting language.
Java Legacy systems are typically larger and numerous.	LEGACY	It has less legacy problem making it difficult for the organizations to copy and paste.
Longer line of code than Python	CODE	Shorter lines of code than Java.
Java database connectivity is popular and widely used to connect.	DATABASES	Pythons access layers are weaker than Java.
Less growth than Python.	SEARCH RESULT	There is significant growth in the search of Python.
The syntax of Java is complex than Python.	SYNTAX	The syntax of Python is easier than Java.
Java because of its statically typed programming is popular for mobile and web applications.	PRACTICAL AGILITY	Python on the other is popular with morerecent choices like ML, AI, Data science, etc.
Due to larger and complex coding than Python, productivity is less.	PRODUCTIVITY	Lesser coding than Java, make its productivity high.
Due to larger and complex coding than Python, productivity is less.	EASY TO USE	Because of simplicity and shorter code Python is easy to use.
Because of complex coding, readability is less.	READABILITY	Shorter coding makes Python more readable.

#1. Code

Java

Longer lines of code as compared to Python
public class EduCba{public static void main
(String [] args)
{System.out.println("Hello EduCba");}}

Python

print ("Hello EduCBA")

#2. Syntax

Java

At the end of statement if you miss semicolon it throws an error.

In java you must define particular block using curli braces without it code won't work.

Python

In python statment do not need a semicolon to end.

In python you have never seen a sight of curli braces but indentation is mandatory in python. Indentation also improves readability of code.

#3. Dynamic

Java

In java you must declare type of the data.

class Example {public static void main (String [] args){
int x=10;System.out.println(x);}}

Python

Python codes are dynamic typed. This means that you don't need to declare type of the variable this is known as duck typing.

x = 45site
= "educba.com"

#4. Speed

Java

In terms of speed
Java is faster. Whenever in projects speed matters the java is best.

Python

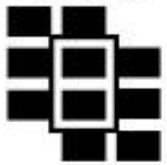
It is slower because python is interpreter and also it determines the type of data at run time.

#5. Portability

Java

Due to high popularity of java, JVM (Java Virtual Machine) is available almost everywhere.

Python



Python is also portable but in front of java, python is not popular.

#6. Database

Java

(JDBC)Java Database Connectivity is most popular and widely use to connect with database.

Python

Python's datbase access layers are weaker than Java's JDBC. This is why it rarely used in enterprises.

#7. Easy to use

Java

Java is not easy to use as compared to python because there is no dynamic programming concept and codes are longer than python.

Python

Python codes are shorter than java. Python follows dynamic programming python codes not only easy to use but easy to understand because of indentation.

#8. Practical Dexterity

Java

Java enjoys more undeviating refactoring support than python thanks to its static type system and universality of IDE's in department.

Python

Python has always had an existence in the talent space and has popularity for many reasons including Data Science and DevOps movement.

#9. Legacy

Java

Java's history in the enterprise and its slightly more verbose coding style mean that Java legacy systems are typically larger and more numerous than python's.

Python

Python has less legacy problem so organisation find difficulty for script to copy and paste codes.

End