Understanding the Syntax Transition: From C to Python

Aspect	C Programming Language	Python Programming Language
Level of Language	Middle-level language	High-level language
Compilation / Execution	Compiled language (uses compiler like GCC)	Interpreted language (uses Python Interpreter)
Syntax Complexity	Complex and lengthy syntax	Simple and readable syntax
Program Structure	Must include #include, main() function	No mandatory main() function
Variable Declaration	Variable type must be declared (e.g., int a;)	No need to declare type explicitly (a = 10)
Typing System	Statically typed	Dynamically typed
Code Blocks	Uses { } braces to define blocks	Uses indentation to define blocks
Semicolon Usage	Semicolon ; required at end of statement	Semicolon not required
Ease of Learning	Moderate (requires understanding of pointers, memory, etc.)	Easy and beginner-friendly
Execution Speed	Faster (compiled to machine code)	Slower than C (interpreted)
Application Areas	System programming, OS, embedded systems	Web development, AI, Data Science, Automation