

**CS1101s**

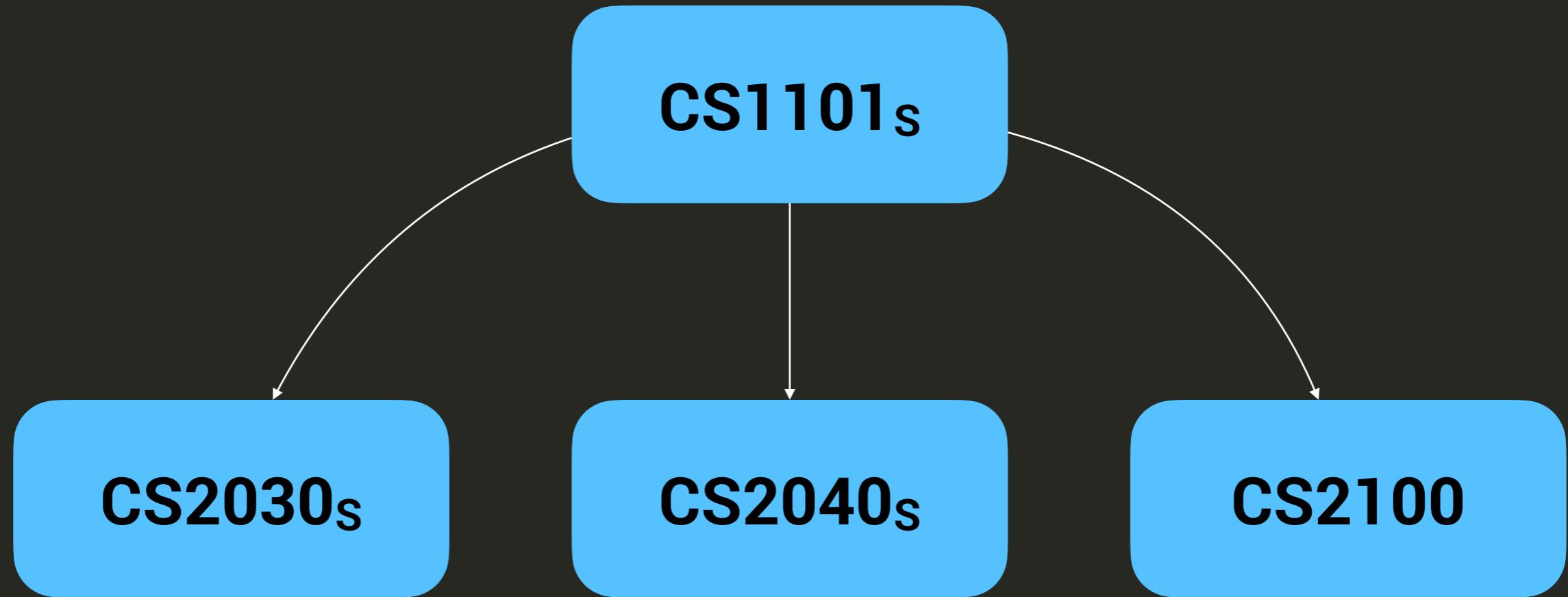
**Orbital**

**CS2103T**

**Internship**

...

C#, C++, Go, Java, Kotlin, Ruby, Rust, Python, Swift, Typescript, ...



Programming  
Languages and  
Software  
Engineering

Theory  
and  
Algorithms

Computer  
Systems

**Source  
Code**

**Compile**

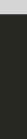
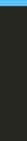
**Executable**

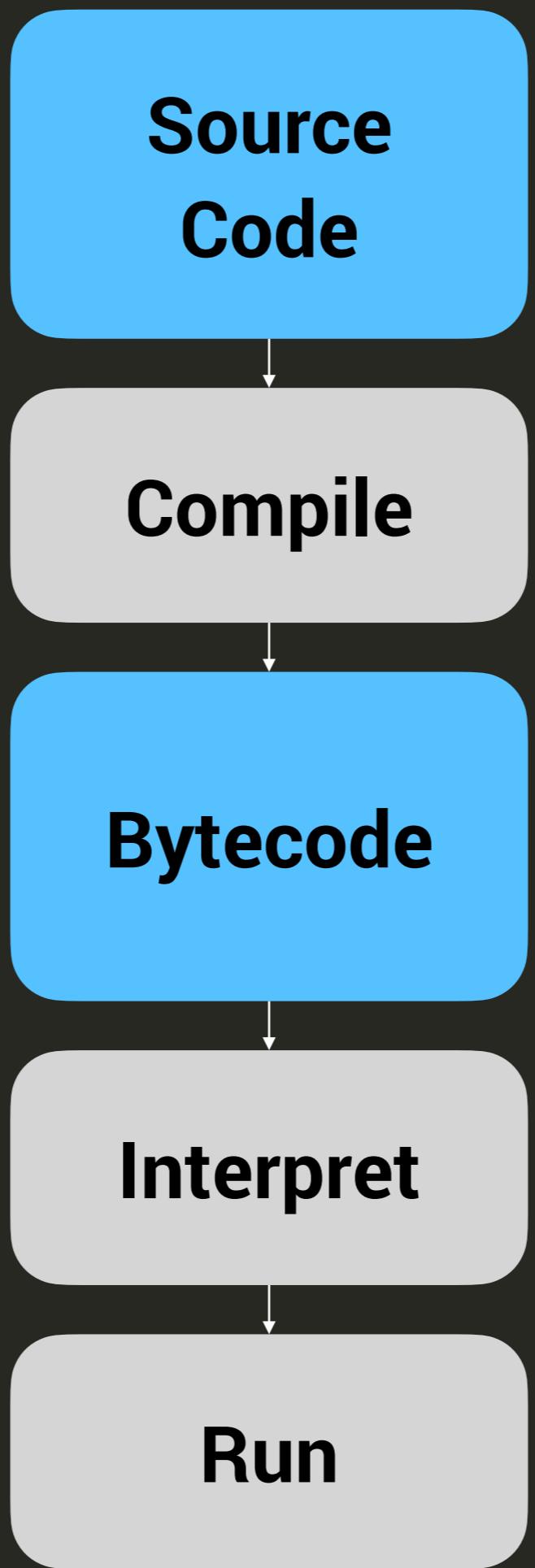
**Run**

**Source  
Code**

**Interpret**

**Run**

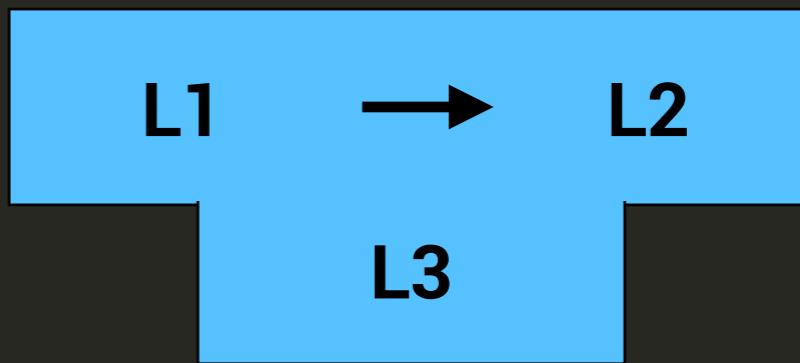




Program written in L



A compiler written in L3  
compiling from L1 to L2



An interpreter written L2  
interpreting L1



A machine  
running in L



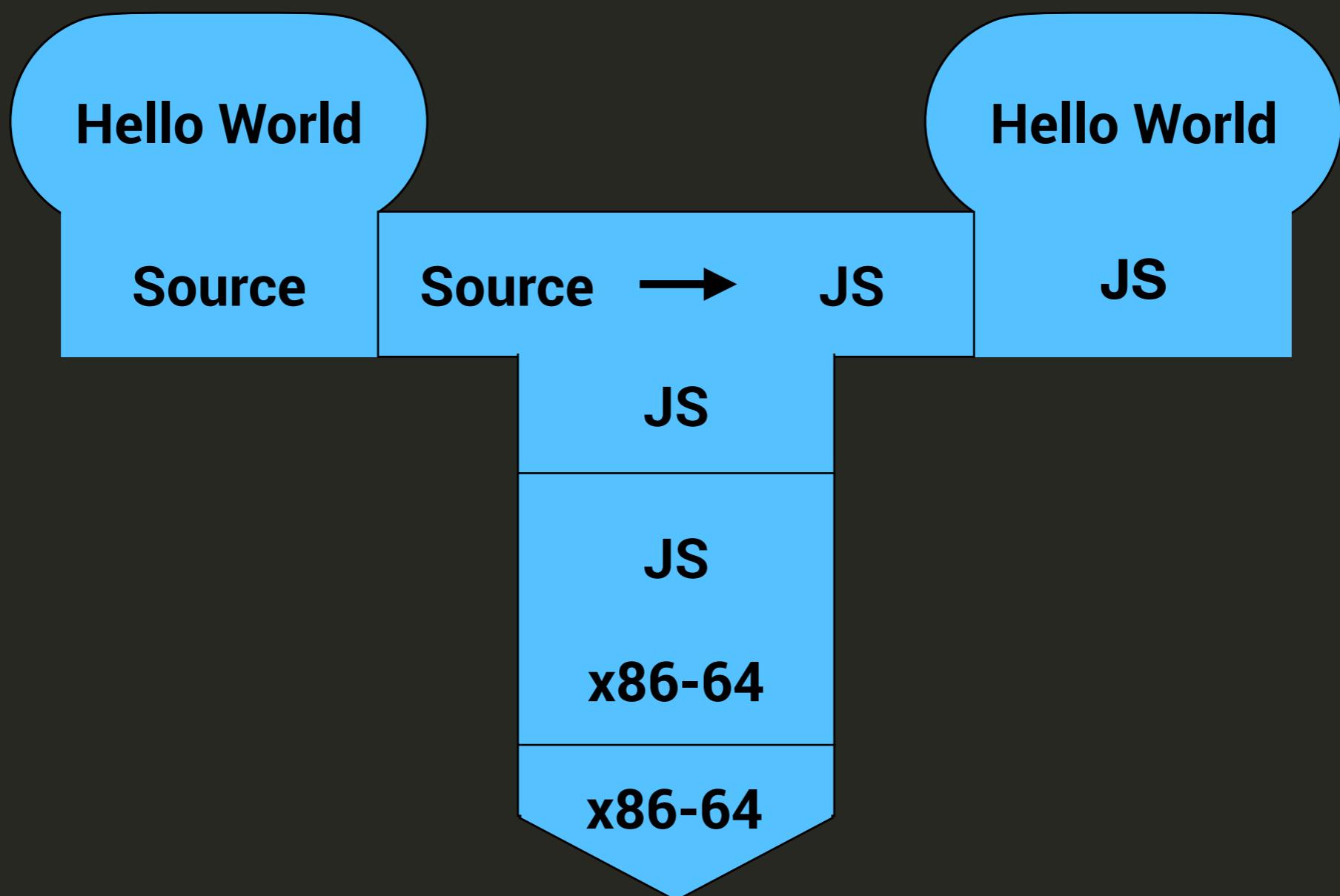
**Source → JS**

**JS**

**JS**

**x86-64**

**x86-64**



**Hello World**

**JS**

**JS**

**x86-64**

**x86-64**

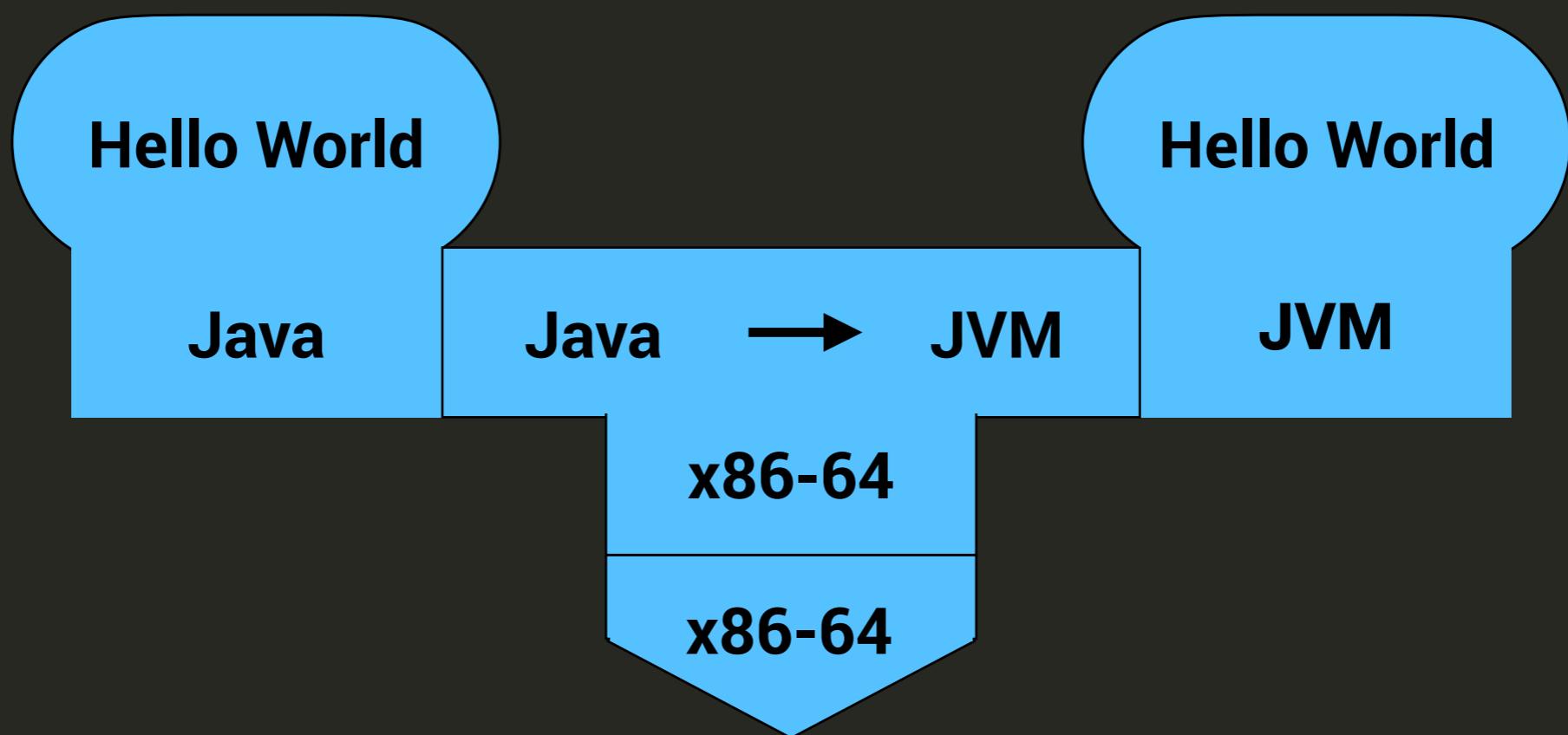
**Hello World**

**Python**

**Python**

**x86-64**

**x86-64**



**Hello World**

**JVM**

**JVM**

**x86-64**

**x86-64**

**Hello World**

**Java**

**Java**

:

**x86-64**

**x86-64**

