

Python

↳ Is interpreted language

↳ Platform independency

↳ Python code

↓
(intermediate form)

↓
Python byte code

↓
↳ Python Virtual Machine

↳ execution ← interpreter

C++

↳ Is a compiled language

↳ no platform independency

↳ compile → run

↓
compilation

↓
execution phase

Python is dynamic typed

C++ is a static typed language. → an explicit
declaration is required for every identifier

↳ `a = 10`

C++ → `int a = 10;`

↳ blocks & indentation

→ int → 4 byte → 32 bit → b → bits

depends on system → generally $-(2^{b-1})$ to $+(2^{b-1}-1)$

→ CPU → 32 bit
64 bit

short → 2 byte → 16 bit

long → 8 byte → 64 bit
general

Char → 1 byte

$\text{uint} \geq \text{short int} \geq \text{short}$

$\text{long long int} \geq \text{long long} \geq \text{long}$

arrays

It is a linear data structure, that stores homogenous elements in contiguous memory locations and is of fixed size.