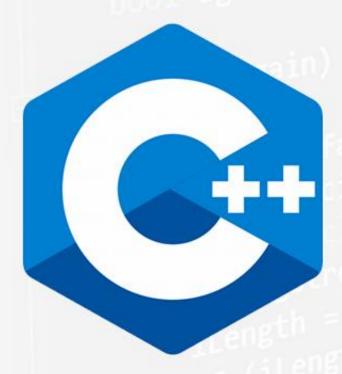
string sinput, int iLength, iN; double dblTemp;



Specialities of C++

From templates and abusive prime numbers

Agenda

- I. History of C++
- II. Peculiarities
- III. Templates
- IV. Examples
- V. Hands-On



History of C++

- Start of Development 1979
- Use Cases: System & Application programming
- Target: C with classes
- Today: Extended generic programming features
- Multiple Standards (ISO/IEC)



Peculiarities

- Compiled language
- Memory management
- Object orientation
- Functional programming
- Generic programming → Templates



Templates

- Introduced with C++14 (alias templates C++11)
- Also called "Metaprogramming"
- C++ equivalent to JAVA generics
- Basis for STL
- Especially useful for:
 - Data structures
 - Static optimizations
- Turing complete!



```
Thank you!
```

