

Algorithm: procedure for solving a problem

Data Structure: how you holdy your data  
in memory

C++	1980s	C = C+1
C	1970s	C++

C++ gives you direct control  
(over memory)

#include                      like python import  
from \_ import \*

python hello.py  
└─┬─┘  
  └─> interpreter

clang++ hello.cpp  
./a.out  
└─> compiler

main will return an integer

```
int main() {  
    ...  
    return 0;  
}
```

python

memory allocated  
dynamically for  
every variable

C++

- ```
int first;
```
- declaration
  - type annotation

Variables are  
statically allocated

```
int gcd(int n1, int n2)
```

type