Python *interpreter*

C, C++, Java *Compiler*

① Compilation
② Execution

myprogram.c

1 **void** **main( )**
2 {
3   Printf ("Hello");
4   Printf ("good morning");
5 }

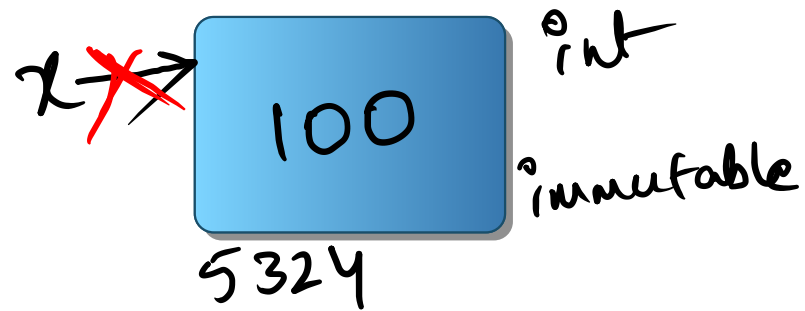→ Print ('Hello') → Translation
                   → Execution

→ Print ('good morning') → Translation
                         → Execution

① Syntax checking

② Translation $\frac{High}{low}$ ↓

③ Save to file
      myprogram.exe

Variable definition

$x = 100$
②　①

x →×→ [100] °int
5324   immutable

$x = 200$

x →×→ [200] int
3587   immutable

$x = $ 'venkat'

x → [venkat] str
8126   immutable
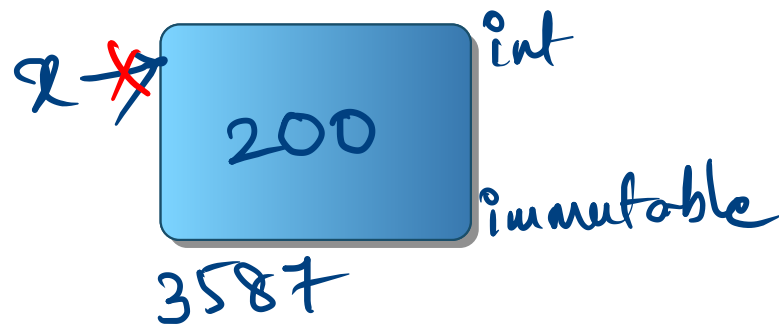
① definition
② data can't be modified
③ Memory name can be modified

Variable declaration

int i;

i → [t̶0̶ 2̶0̶ 50] int
1254
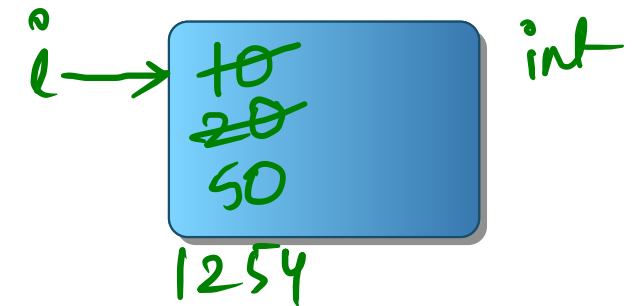
$i = 10;$
$i = 20;$
$i = 50;$
$i = $ 'venkat';

① declaration
② data can be modified
③ Memory name can't be modified