



Problem Solving through Programming in C

COE 251

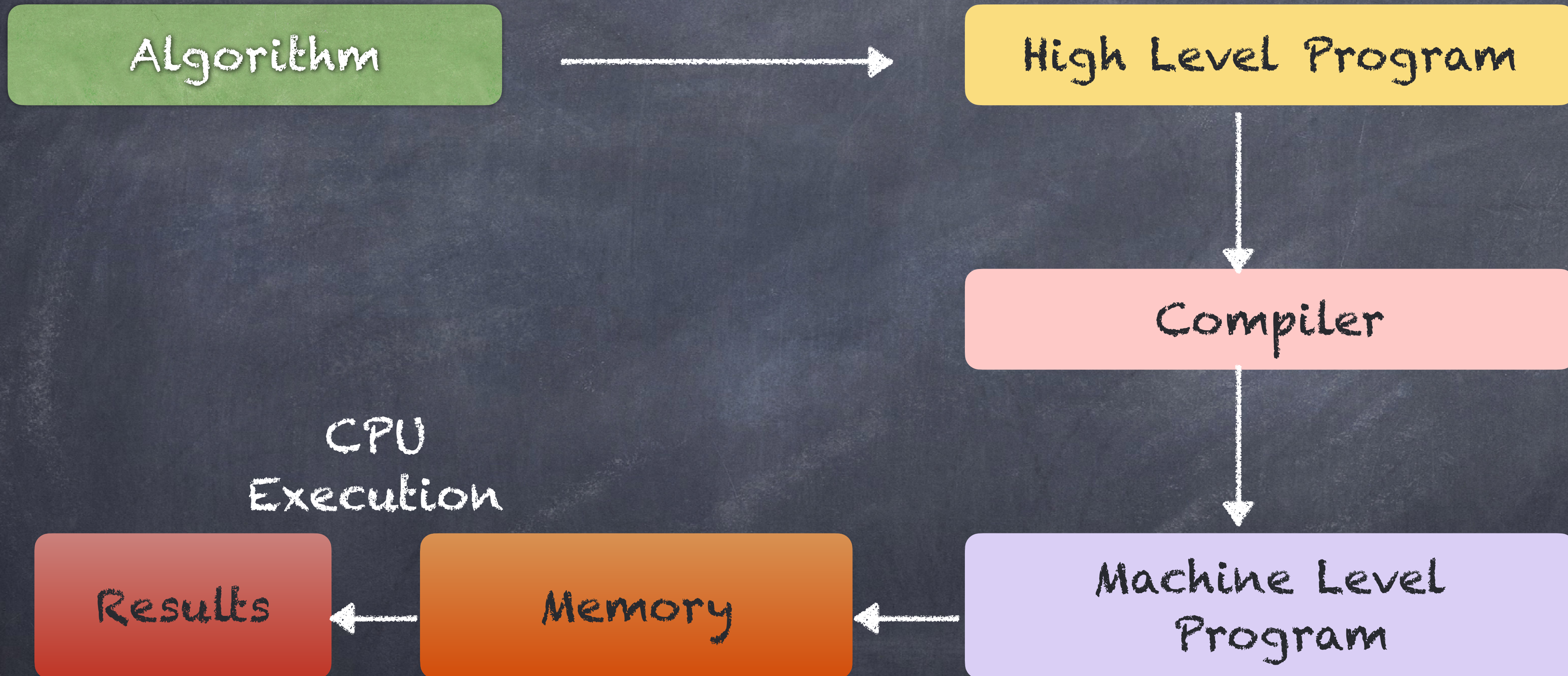
WEEK 1: VARIABLES AND MEMORY



VARIABLES & MEMORY



RECAP





VARIABLES & MEMORY

In the previous examples we came across pseudocodes like ...

SUM = SUM + NUM1

MAX = NUMBER

GS = 4

Variables

Values



MEMORY MAP



Every variable is mapped to a particular Memory address



Instructions & Variables in Memory

Instructions Executed

Memory Location Allocated
to a Variable "X"

Time

$X = 10$

10

$X = 20$

20

$X = X + 1$

21

$X = X * 5$

105



Instructions & Variables in Memory

Instructions Executed

Variable
x y

Time
↓

$X = 20$



20

?

$Y = 15$



20

15

$X = Y + 3$



18

15

$Y = X / 6$



18

3



Next...

Types of Softwares and Compilers