- Topic1.cpp (source code) —gcc -Wall -c -g .cpp (complier translator)→ Topic1.obj —gcc -Wall -g -o name.exe .obj (complier translator)→ Topic1.exe

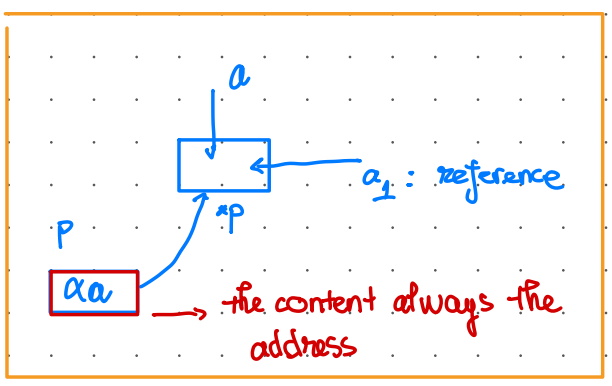
- appropriate environment → GUI / CLI (command line interface)

- error message : complier way that interact with programmer.

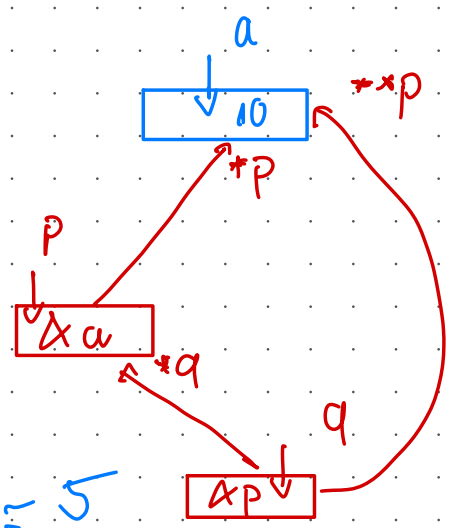
- Define a variable : — Data type : (integer, float, double) — Name : — Value :

- Slot of mean :
  - Size : data type (4 Byte)
  - Access : name a
  - Content : Value (changable)
  - Location : address &a

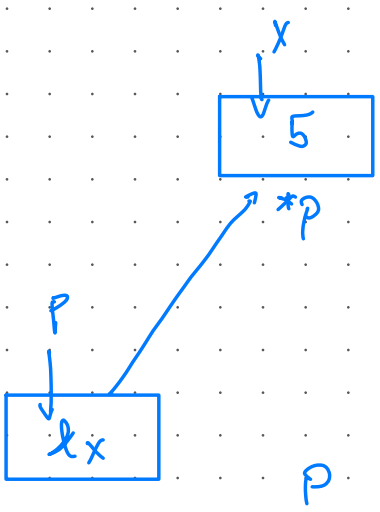
- Variables vs References vs Pointers
  - int — Base data
  - int &
  - int *



type
- Level 0 : var (int)
- Level 1 : pointer (int*)
- Level 2 : pointer (int**)

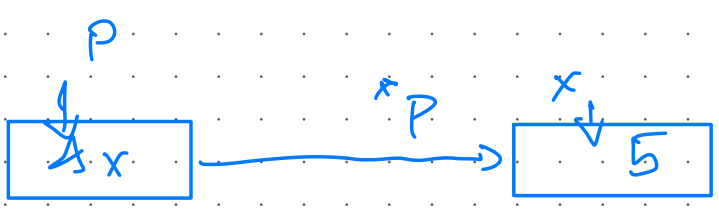


1)



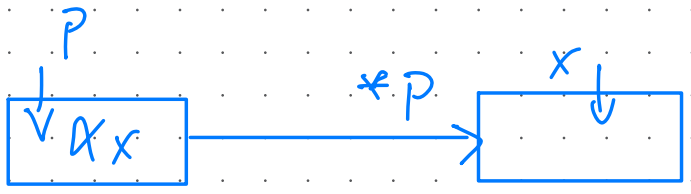
=> *p = x = 5

2)



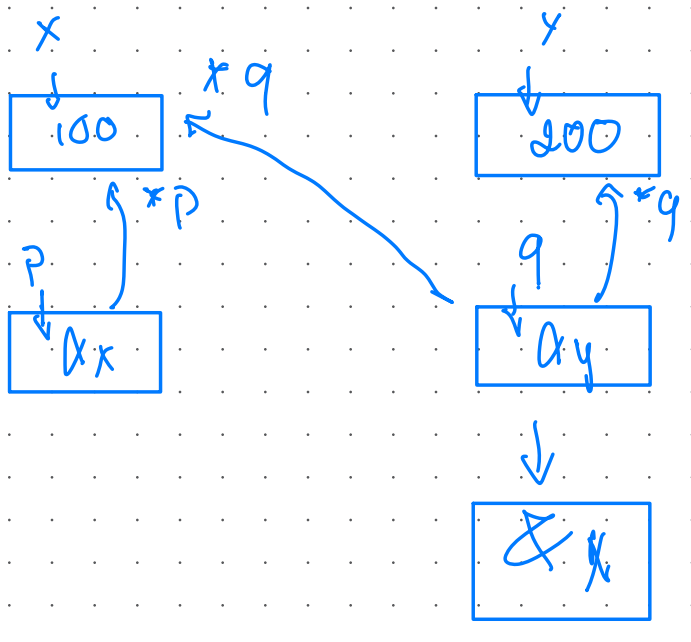
=> *p = x = 5

3)



=> *p = 8

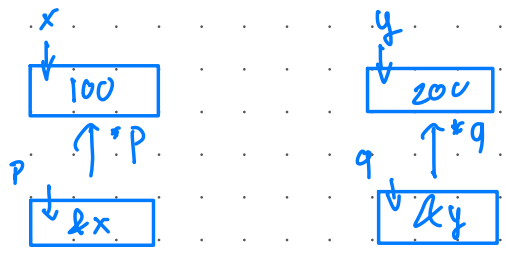
5)



=> x = 100 , y = 200

=> *p = 100 , *q = 100

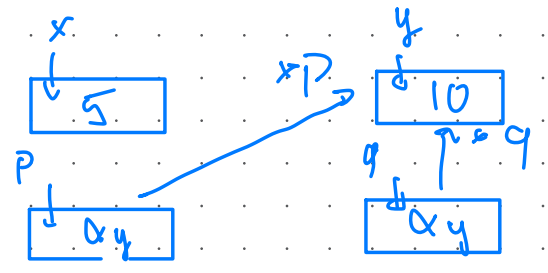
4)



=> x = 100 y = 100

=> *p = 100 *q = 100

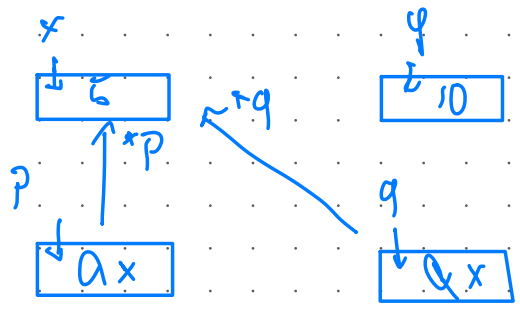
6)



=> *p = 10 , *q = 10

=> y = 1 , x = 5

7)



=> x = 10 , y = 10