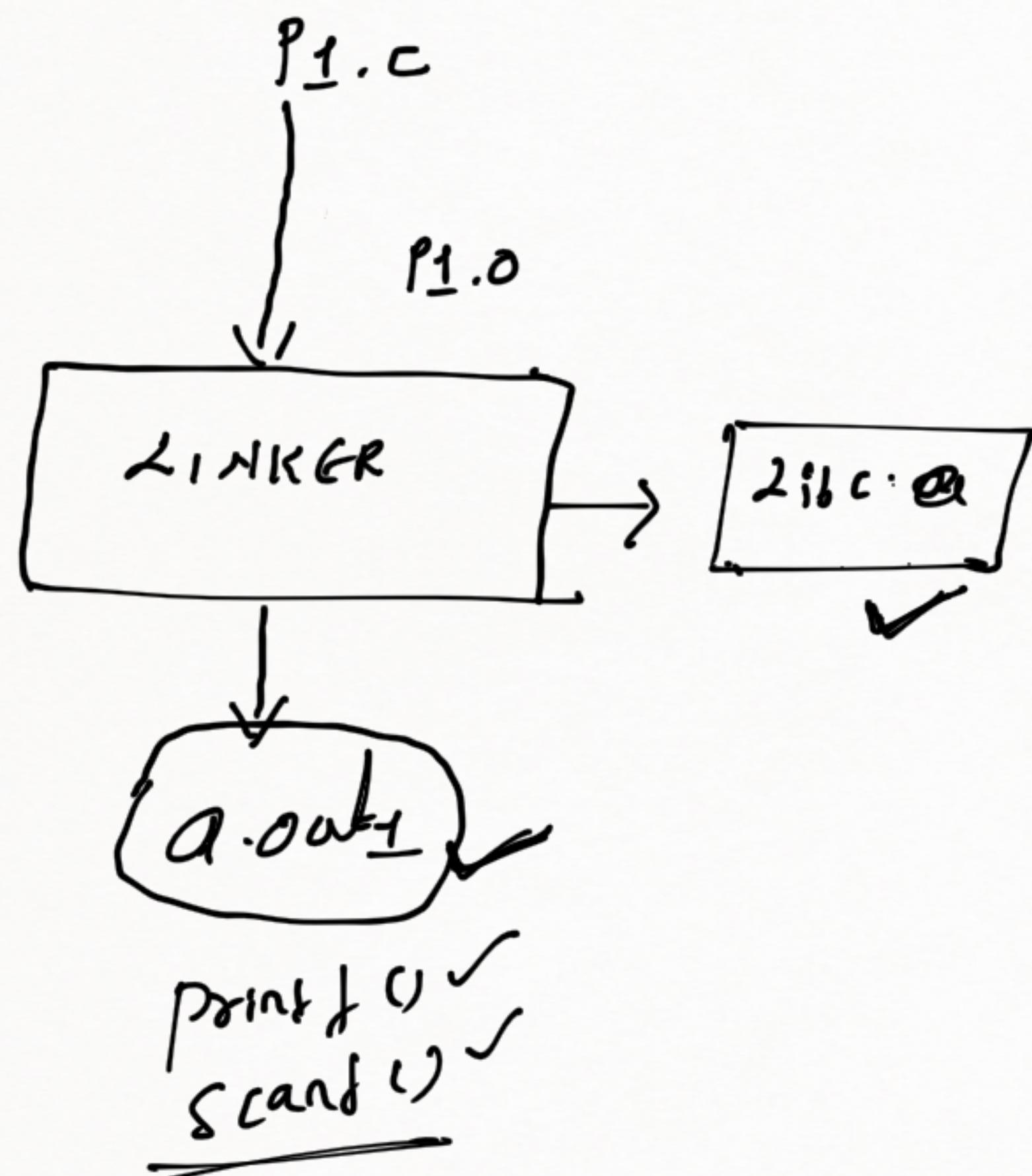
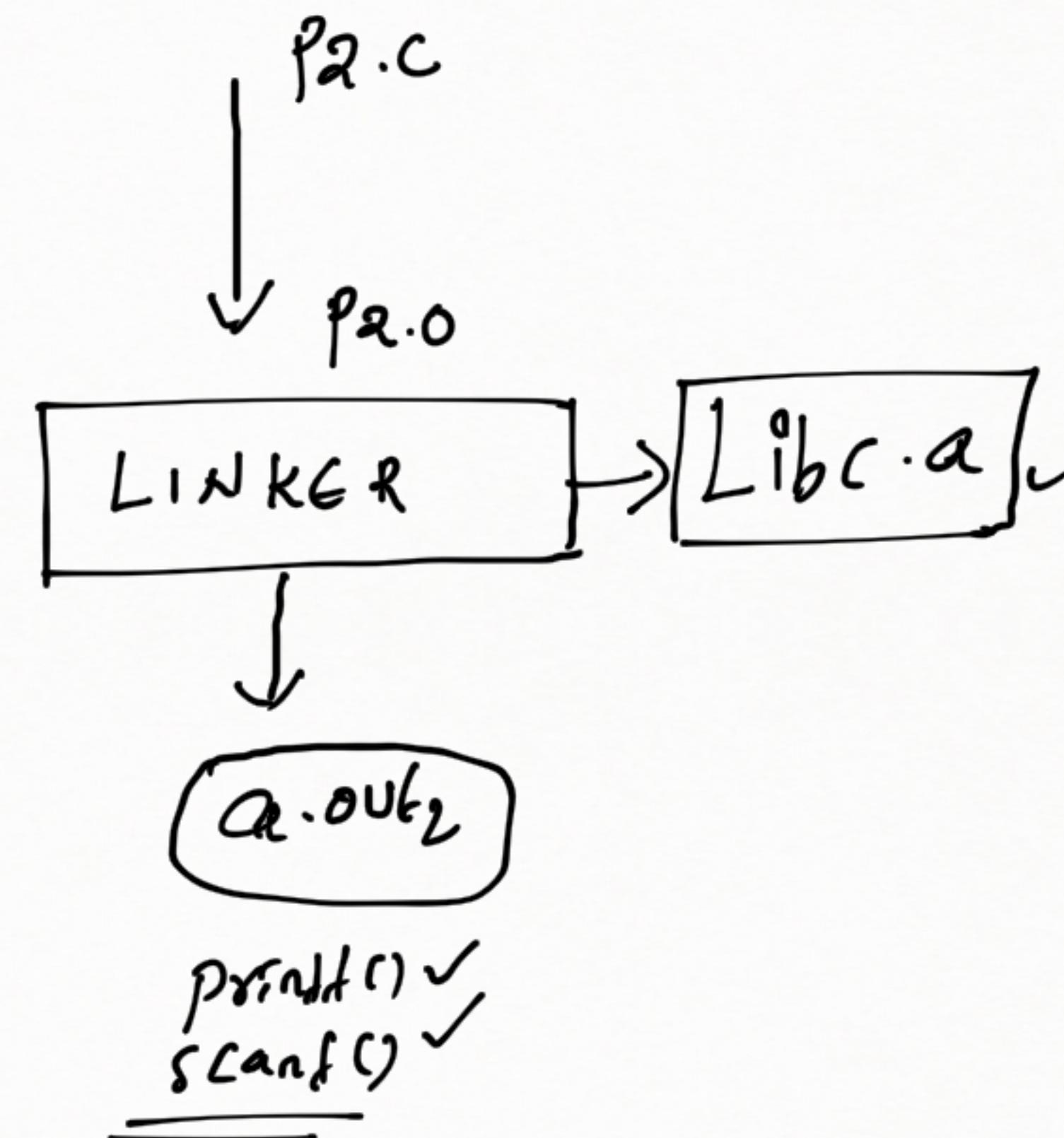


Date: 21 - 9 - 21

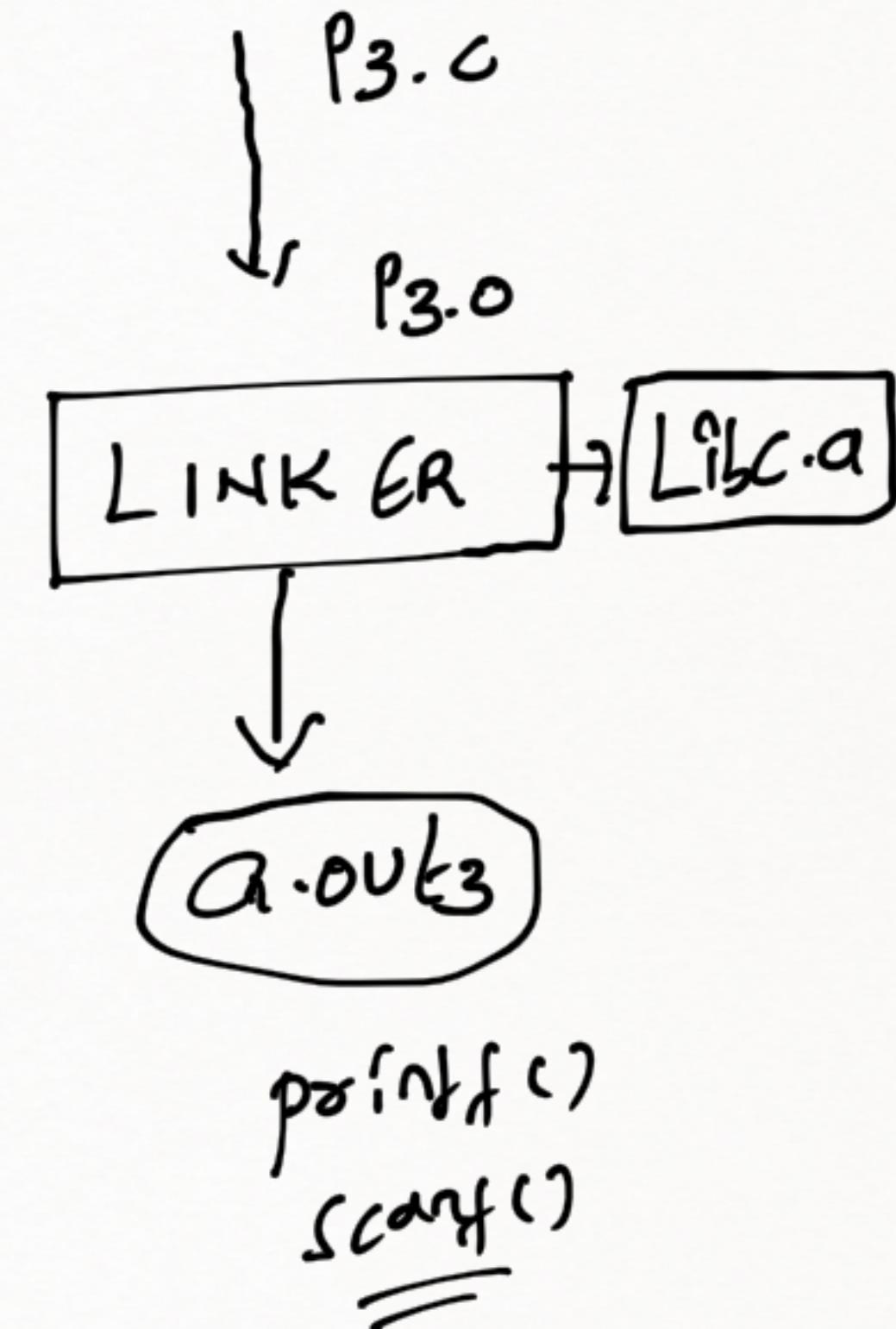
\$ cc -static p1.c



\$ cc -static p2.c

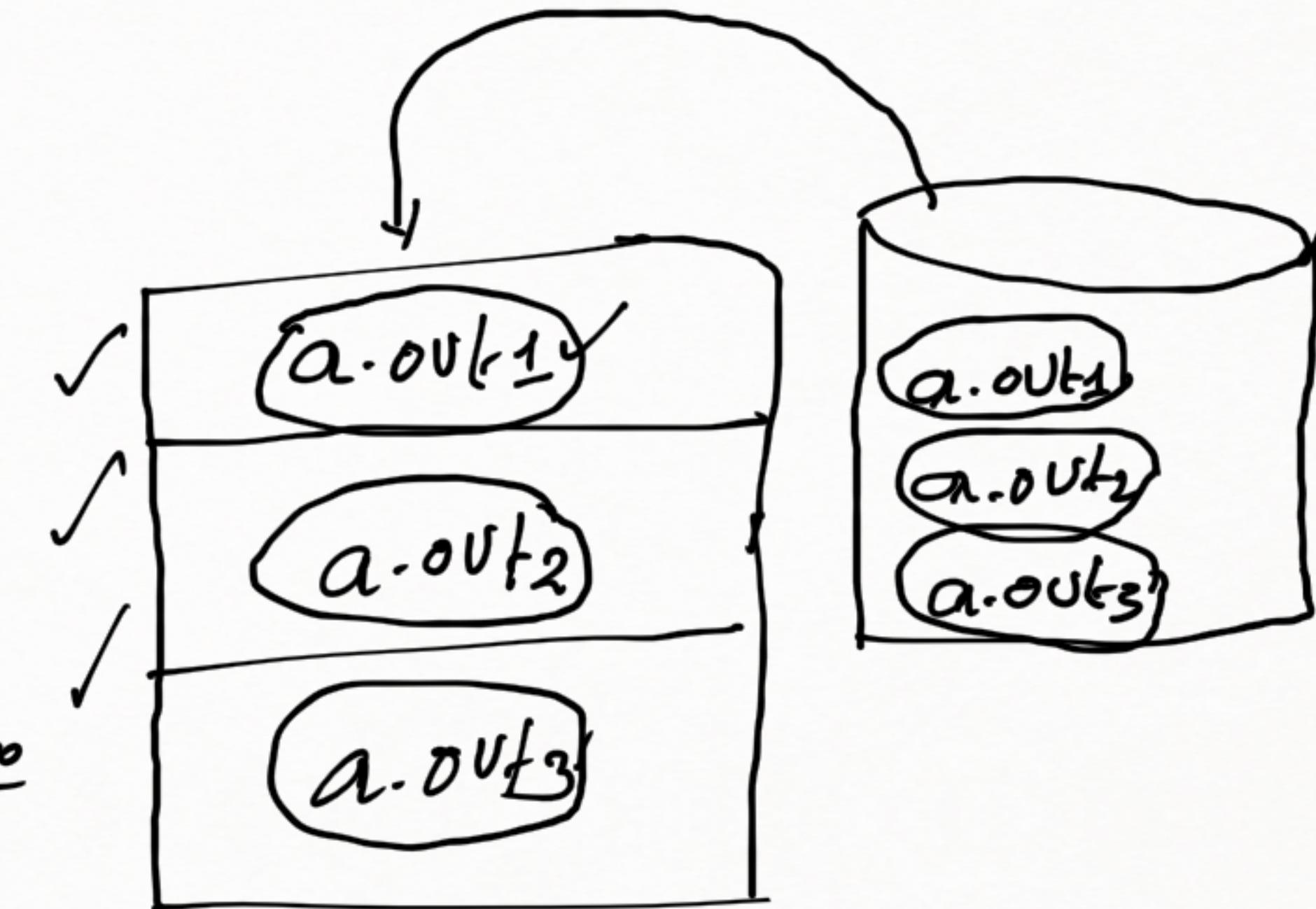


\$ cc -static p3.c



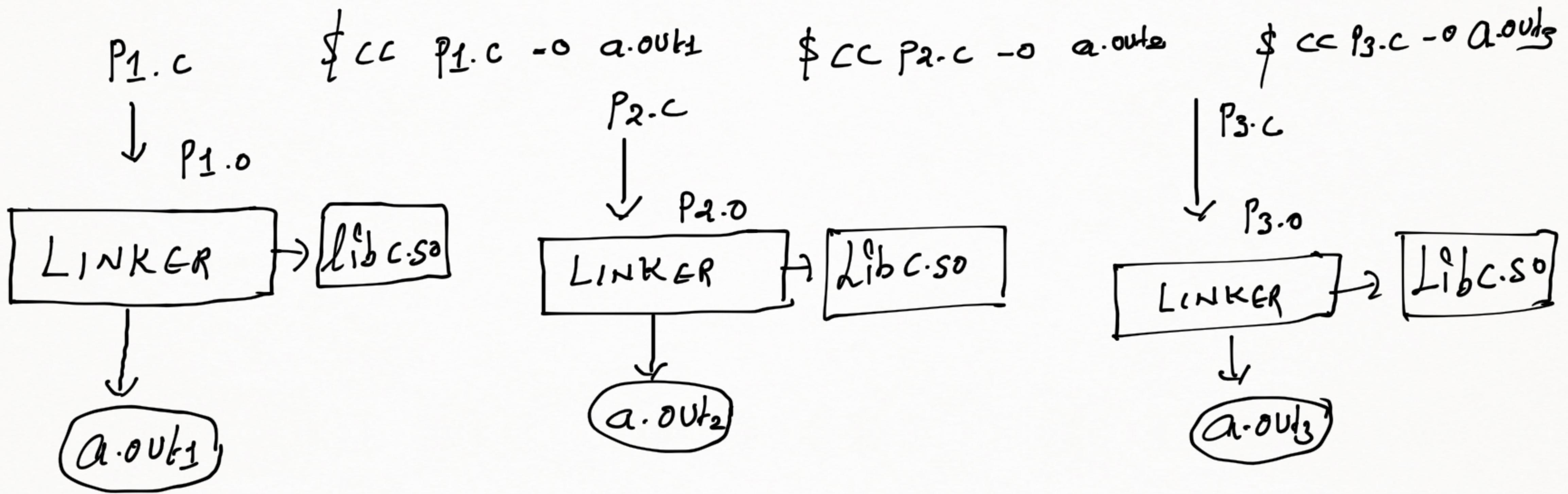
①

→ since a.out₁, a.out₂ & a.out₃ all these executable files generated by linking to static library hence same function definition copied more than once it leads to extra memory space.



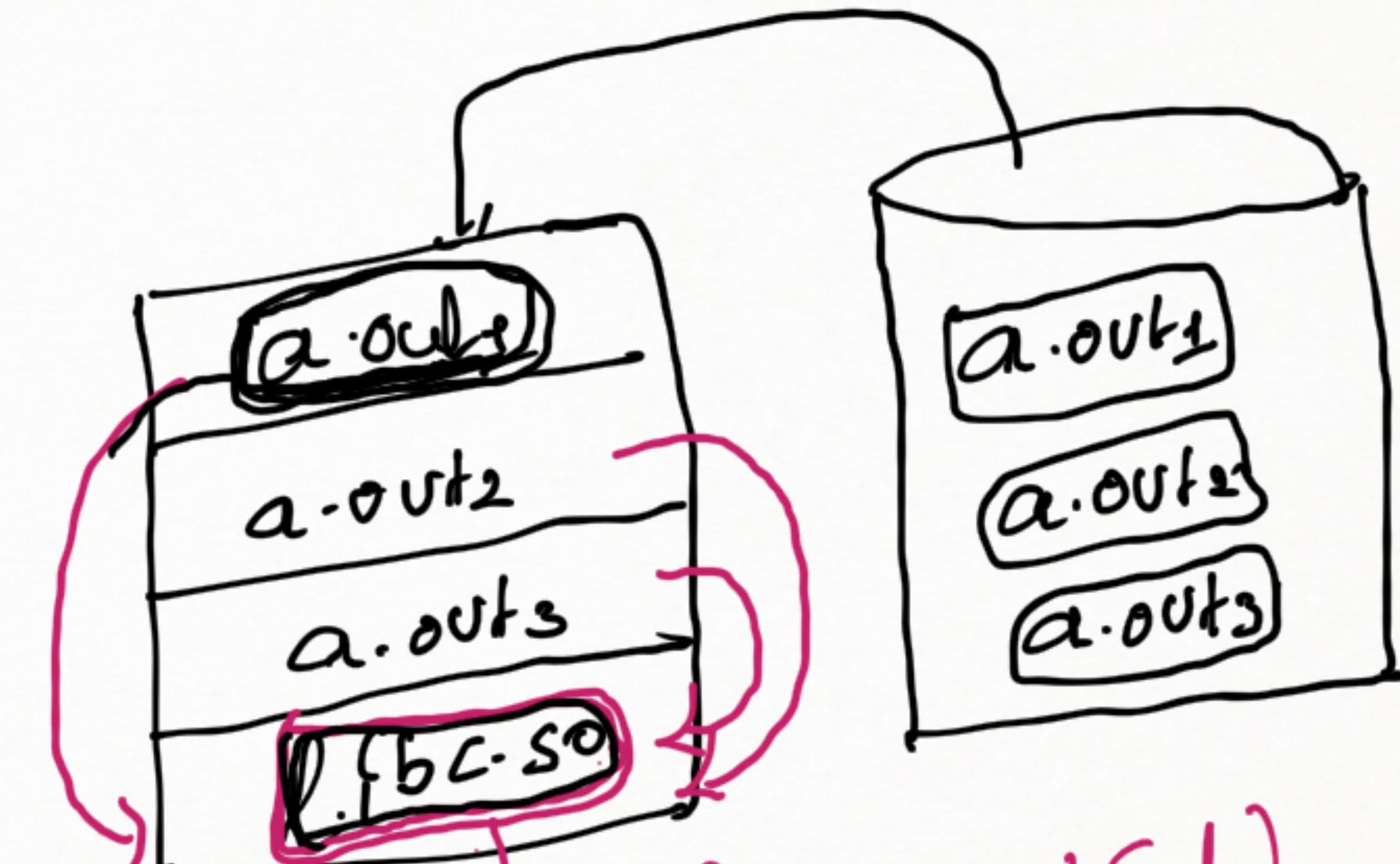
②

when ever any changes (or any bug fix) happens for the library it is mandatory to recompile the program. Then only changes are effected.

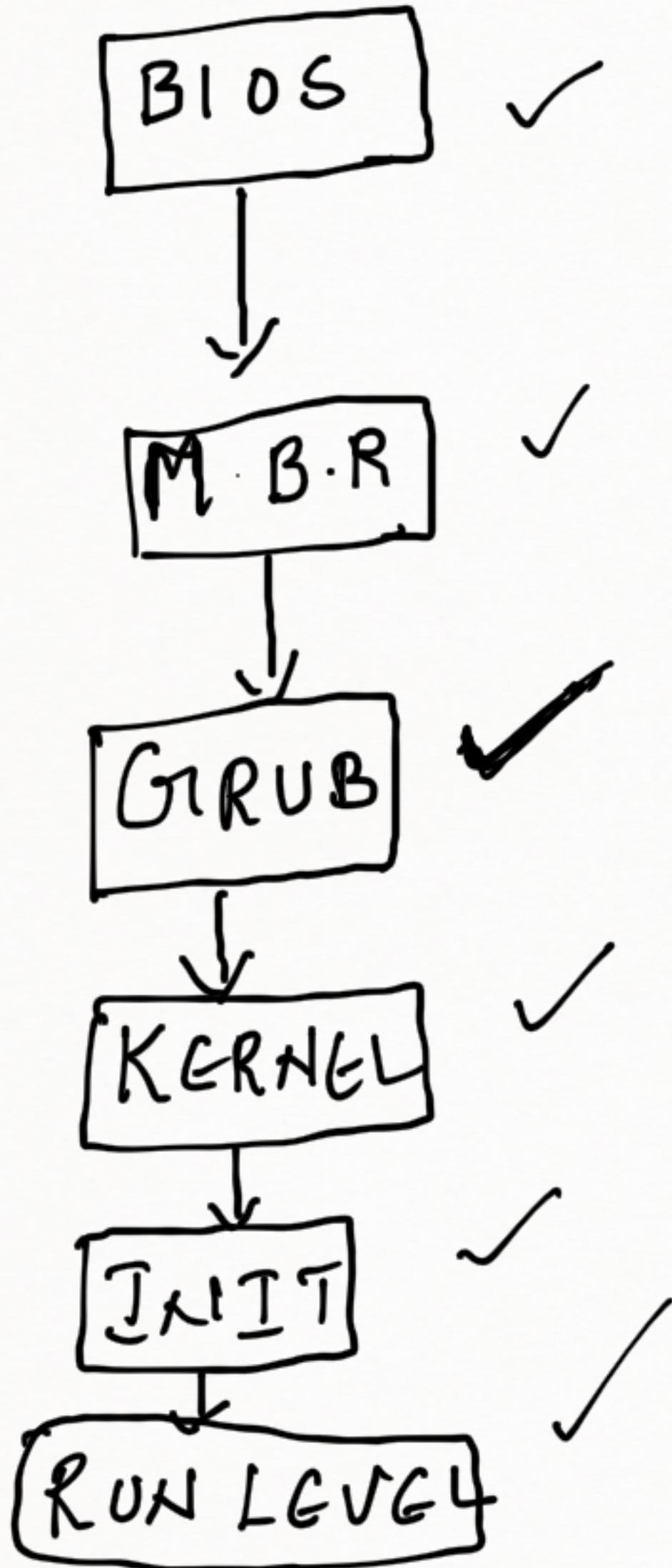


⇒ Any changes / bugfix in library,
no need for recompilation.

⇒ major limitation
dynamic libraries at run time
will take some amount of time
to bind the function (to locate the function definition).



(Shared object)



OS booting process

BIOS \Rightarrow Basic Input / Out system

MBR \Rightarrow master boot record

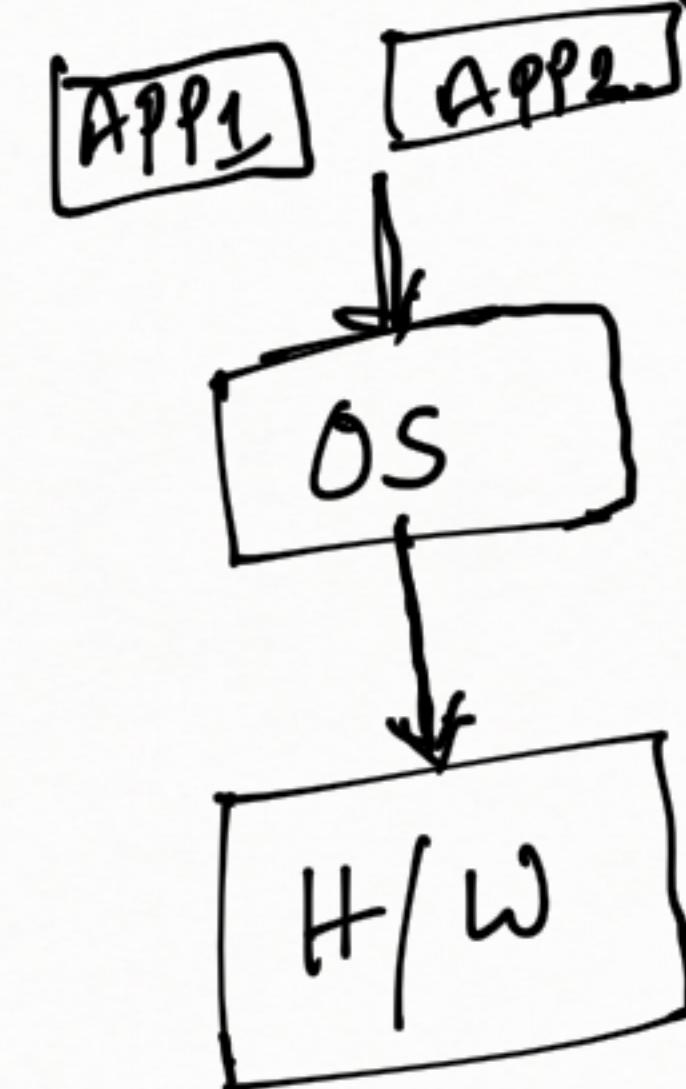
GRUB \Rightarrow Grand unified boot loader

KERNEL \Rightarrow Core of os is called Kernel

INIT \Rightarrow pid of init is 1 process fd

RUNlevel \Rightarrow init will execute run level programs

⇒ What is OS?
OS is a SW program if it is running under a
specific h/w and manages the system resources.



⇒ What are the components of OS?

- For every application
there is a need of
service
- OS
- Applications
- Services
- File manager
- HW manager
- ```
graph TD; OS --> Applications; OS --> Services; Applications --> Services; Services --> FileManager[File manager]; Services --> HWManager[HW manager]
```
- ⇒ Services are mandatory  
but applications are optional