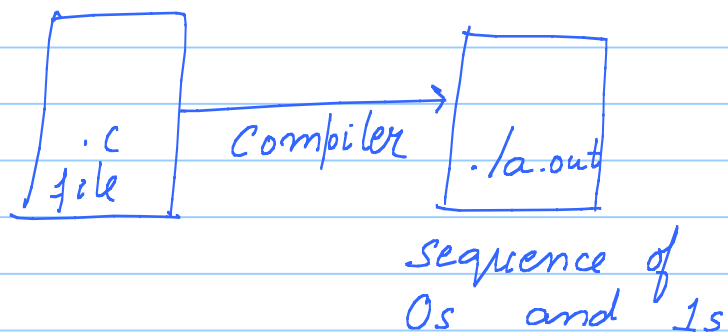


August 10th

Note Title

10-08-2011



a.out binary

formats

Linux	} Windows
ELF-32	
	.Exe

run an a.out

↳ requesting the OS to run a.out for us

- (1) Locates the file
 - (2) Reads the header
 - (3) Loading the program
- Loader

- 1) Create a separate process
- 2) Set the PC to the first instruction

of the program

Linan: How does the loader work?

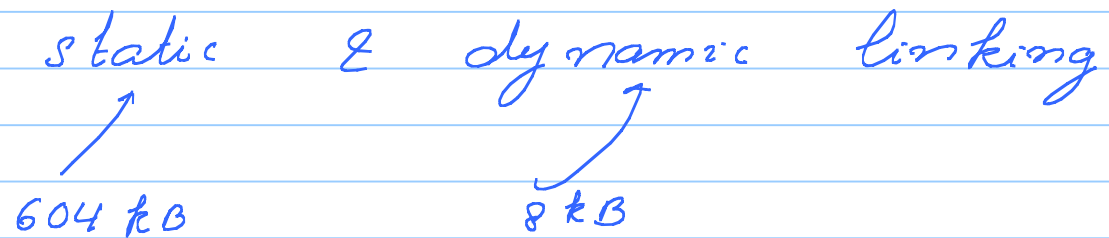
C program

```
#include <stdio.h>
```

We learnt:

static & dynamic linking

604 KB 8 KB



ldd command to find out if a file is static or dynamic.

Compilation process: .c → .o (machine code) [relocation] → a.out (linking multiple .o)

lists all the
function & variables
that are defined
externally

a.out → statically linked
→ dynamically linked

FIRST TIME: STUB function → load the real version
of the function from the
.so file.

Subsequently: No use for the stub function.
Directly call the real version.

Next Class: Assembly Code / Programming

Timings: Wednesday — 11 — 12:15 PM
Saturday — 11 — 12:30 PM