Address Binding

Who assigns memory to segments?

Static-binding: before a program starts running

Compile time: Compiler and assembler generate an object file for each source file

Load time:

- ▶ Linker combines all the object files into a single executable object file
- ▶ Loader (part of OS) loads an executable object file into memory at location(s) determined by the OS
  - invoked via the `execve` system call

Dynamic-binding: as program runs

- ▶ Execution time:
  - ▶ uses `new` and `malloc` to dynamically allocate memory
  - ▶ gets space on stack during function calls