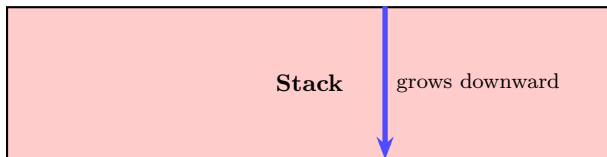


Program Memory Layout

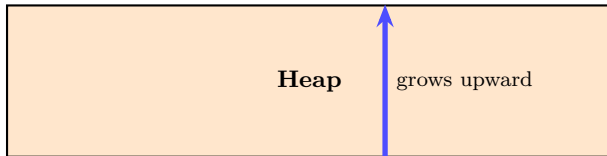
High Address



Stack

grows downward

- Local variables
- Function parameters
- Return addresses
- LIFO structure



Heap

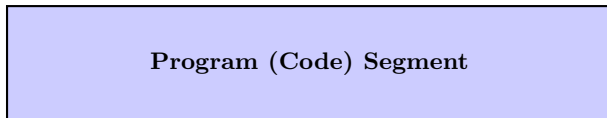
grows upward

- Dynamic allocation
- malloc() / free()
- Variable size at runtime



Static/Global Data Segment

- Global variables
- Static variables
- Lifetime: entire program



Program (Code) Segment

- Machine instructions
- Read-only
- Fixed size

Low Address