

Low Addresses are Reserved for the Operating System

Low addresses are usually reserved for the OS.

With LC-3, we have

- trap vector table at x0000 to x00FF,
- interrupt/exception table at x0100 to x01FF, and
- OS code (trap subroutines).



High Addresses Also Reserved for the Operating System

High addresses are also usually reserved for the OS.

With LC-3, we have memory-mapped I/O at xFE00 to xFFFF.

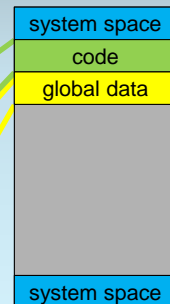


Code and Data are Mapped After the Low System Area

User code is usually mapped into memory after the system space.

With LC-3, code starts at x3000 by convention.

And program data is mapped into memory after the code.



The Stack is Mapped Above the High System Area

The stack is mapped just above the high system area.

With LC-3, the base can be xFE00, allowing the stack to grow into unused memory.

