

for a more accurate and detailed map of the x86 memory look at <a href="https://wiki.osdev.org/Memory\_Map\_(x86)">https://wiki.osdev.org/Memory\_Map\_(x86)</a>

## Each processor has its Instruction Set Architecture (ISA)

Processor executes instructions stored in memory

- → Each instruction is a bit string that the processor understands as an operation
  - arithmetic
  - read/write bit strings
  - bit logic
  - jumps
- √ ~2000 instructions on modern x86-64 processors