The big picture in 5 pieces

The need for **bootstrapping**	
The need for **concurrency**	project 1
The need for **user programs**	project 2
The need for **virtual memory**	project 3
The need for **a filesystem**	project 4

0x FF FF FF FF

I/O
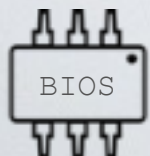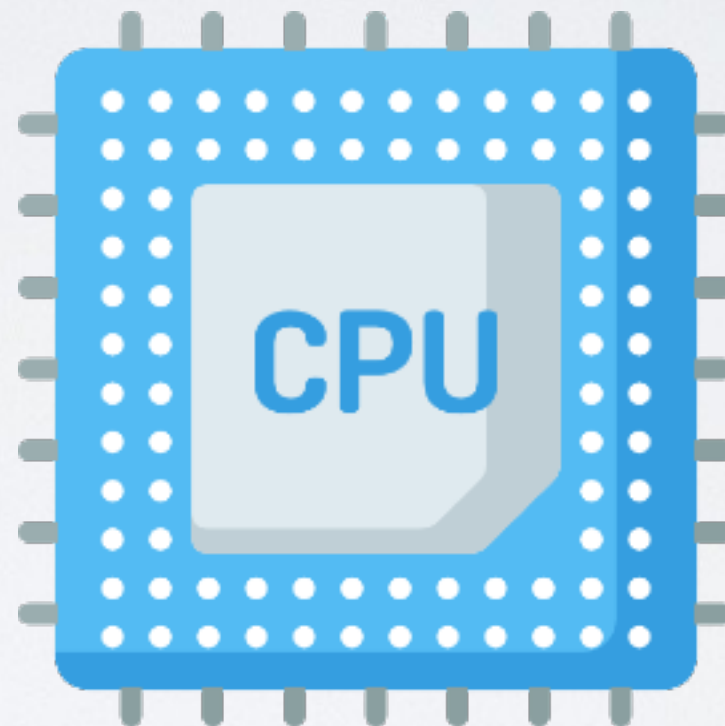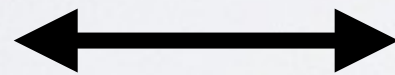
Simple Computer Architecture
Memory + CPU

CPU

RAM

BIOS

Boot

0x 00 00 00 00

for a more accurate and detailed map of the x86 memory
look at https://wiki.osdev.org/Memory_Map_(x86)