Before `main`

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- xv6 is loaded continuously into phyiscal address 0x00100000 and up.
- The gdtr points to a temporary gdt with 3 entries:
  - The base field is zero in entries 1 and 2.
  - The limit field is maximal in entries 1 and 2.
  - Two entries are needed in order to allow data and code permissions.
- cr3 points to a temporary page table:
  - The paging unit effect with this translation table is:

$$800xxxxx \mapsto 000xxxxx$$
$$801xxxxx \mapsto 001xxxxx$$
$$802xxxxx \mapsto 002xxxxx$$
$$803xxxxx \mapsto 003xxxxx$$

- Note, when xv6 had been built it was linked with base address 0x80100000.

self test

- Build paging table as above.
- Why xv6 had been linked into 0x80100000.