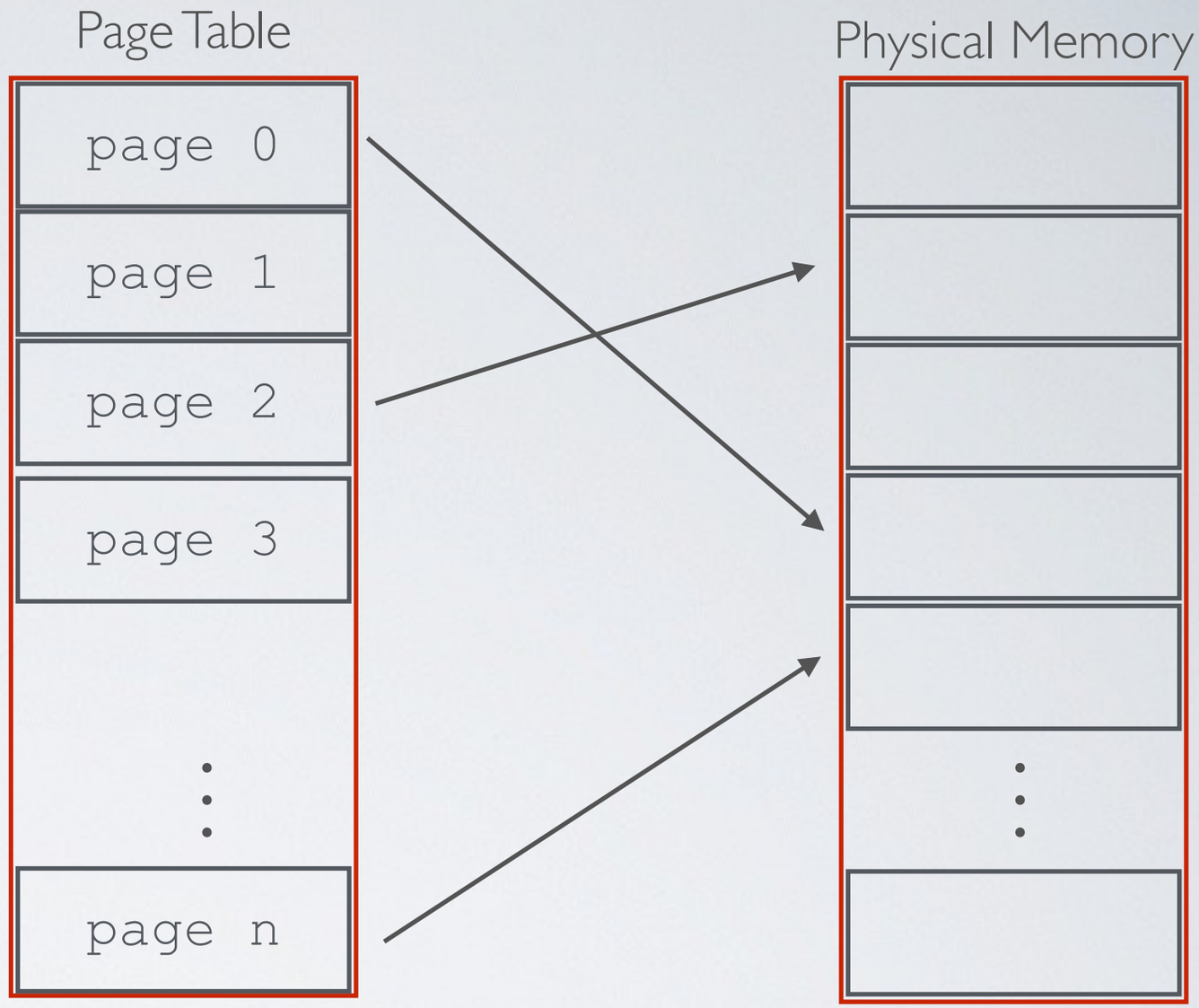
The problem



Each process has a page table defining its address space

- Considering 32-bit address space with 4K
  the size of the pages table is $2^{32} / 2^{12} \times 4\ \mathrm{B} = 4\mathrm{MB}$ / process
  this is a big overhead!

Solution

- **Problem**: each process has a page table that maps all pages in its address space

✓ **Solution**: we only need to map the portion of the address space actually being used

➡ Use another level of indirection : **two-level page tables**