Problem Set 13

CS 411

Due at the beginning of class on the first class day of the following week.
Sections 9.1–7

1. Consider the following segment table:

Segment	Base	Length
0	219	600
1	2300	14
2	90	100
3	1327	580
4	1952	96

   What are the physical addresses for the following logical addresses?

   (a) 0,430

   (b) 1,10

   (c) 2,500

   (d) 3,400

   (e) 4,112

2. Consider a computer system with a 32-bit logical address and 4-KB page size. The system supports up to 512 MB of physical memory. How many entries are there in each of the following?

   (a) A conventional, single-level page table

   (b) An inverted page table

3. What is the purpose of paging the page table? Does a paged page table use more, the same, or less memory than a single-level page table?