

CSCI 315 Operating Systems Design  
Fall 2016 - Prof. Felipe Perrone  
Activity 15

Imagine that you are designing processor hardware to support **segmentation**.

- a) Given a logical address, the system must identify to which segment the address corresponds and, furthermore, how to find an individual byte within the segment. Describe how one must interpret a logical address in order to accomplish the task described above.
  
  
  
  
  
  
  
  
  
  
- b) Draw a diagram to show how your system's hardware translates logical addresses to physical addresses. Your design should be able to detect when an address reference goes beyond the boundaries of a segment.