* 1. 16,000 frames
  2. 13 bits
  3. 19 bits

1. 1. 1. at the first level it is 18, at the second it is 324, at the third level it is 5832
   2. 1. At the first level it is 14, at the second is 196, at the third level it is 2744
2. 1. Segmentation causes external fragmentation as the sections of the program can be broken up into different segments and fill different holes as they become available
   2. Paging causes internal fragmentation since the program’s data may not fill up a whole page
3. The number of frames greatly affects the performance of a program, as when there are less frames the page faults occur very often. As more frames are put into the system the number of page faults decreases asymptotically.