

1. (12 p)

(a) (4 p) What is pure demand paging?

[**HINT:** start process with no pages in memory]

(b) (4 p). Can Belady's anomaly be observed for the reference string 1, 2, 3, 4, 1, 2, 5, 1, 2, 3, 4, 5 when moving from 3 to 4 frames? Show why.

[**HINT:** Yes, 3 frames 9 faults, 4 frames 10 faults.]

(c) (4 p). What does the term "locality" means in the context of a process execution? What measures can be taken by an OS to take advantage of localities?

[**HINT:** One process accessing the same (small) set of memory location over a certain period of time. Keeping the respective pages in memory at the same time to reduce page faults, for instance.]