

Ahmed Saaif 661925946 ahmeds7@rpi.edu

Monday, April 27, 2020 9:56 PM

1

A: There is simplicity in this design but you lose some efficiency. In addition there can be internal fragmentation

B: Any size is dynamic, and efficient space wise as the only things used is the space needed. It may have external fragmentation and coalescing problems though.

2

$16 * 12 = 192 \text{ KB}$

$12 * 1024 = 12288 / 4 = 3072 \text{ KB}$

$3072 * 3072 = 9437184 \text{ KB}$

$3072 * 3072 * 3072 = 2E10 = 2E10 = 27648 \text{ GB}$

27657 GB 3264 KB

3

It should be able to because the free space still exists. It can be found linearly.