

Chapter 12:

5. Since the FIFO order is followed, $10000 * 200 \text{ ms} = 2 \text{ s}$.

6. $10,000 / 100,000 = 0.1 \text{ s}$

Chapter 13:

1):

Number of ptrs/block = $6K/6 = 1000$

$(12 * 6KB) + (2048 * 6KB) + (2048 * 2048 * 6KB) + (2 * 2048 * 2048 * 2048 * 6KB) + (2048 * 2048 * 2048 * 2048 * 6KB) = 10^{17} \text{ KB}$

2)

Number of Address per Block = $6 * (2^{10}) / 6 = 2^{10}$

Given that 12 direct Blocks, $12 * 6KB = 72KB$

1 indirect Block = $2^{10} * 6KB$

1 Double Indirect Block = $(2^{10}) * (2^{10}) * 6KB$

2 Triple Indirect Block = $2 * ((2^{10})^3) * 6KB$

1 Quadra Indirect Block = $((2^{10})^4) * 6KB$

Total file size is $(12 + 2^{10} + 2^{20} + (2^{30}) * 2 + 2^{40}) * 6KB = 6156.0058TB$