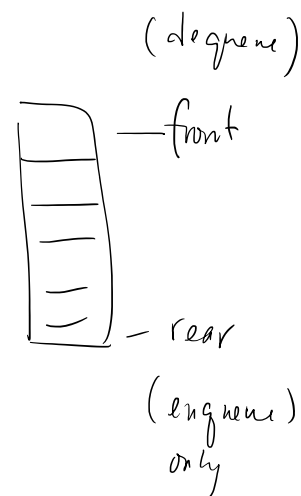
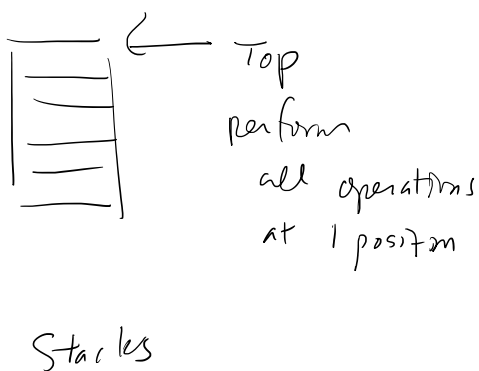
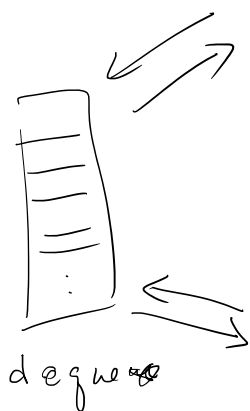


Elementary Data Structures ..

	Stacks	Queues
Sequential Allocation	✓	✓
Linked Allocation	✓	See Brass's example

Stacks : LIFO

Queues : FIFO



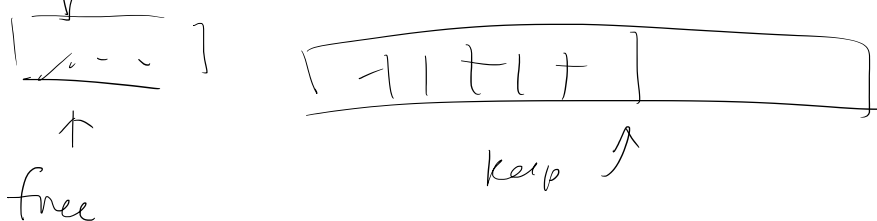
Vectors

approaches the limit, double the size of the array

①



②



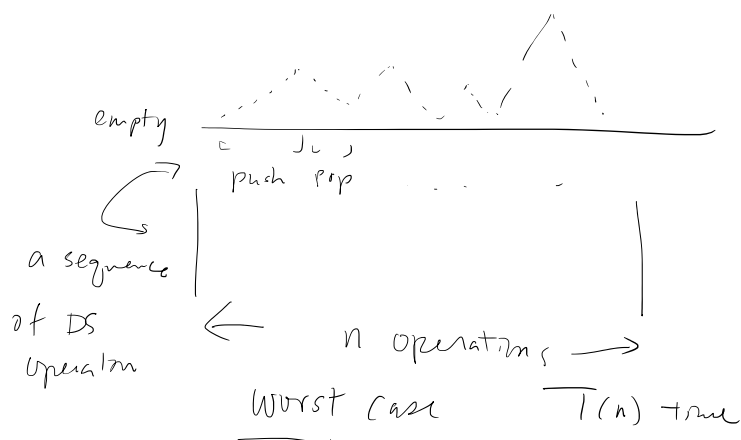
Amortized Analysis



↑ push ↑ pop

$$\frac{T(n)}{n}$$

Running a program



$$T(n) \leq 3n$$

$$T(n) \leq c \cdot n$$

↑
Constant

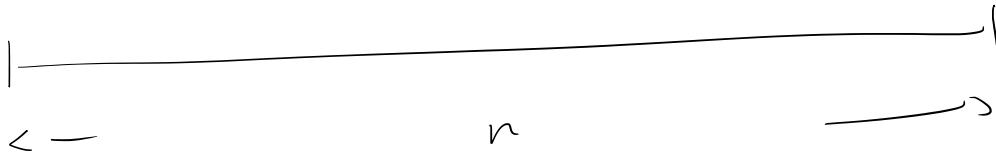
$$\therefore \frac{T(n)}{n} \approx c$$

$$\frac{T(n)}{n} \approx c \quad \swarrow \text{constant}$$

$$\frac{T(n)}{n} = \Theta(1)$$

Stacks (CLRS Ch. 17.1)

push pop multipop



$$\frac{T(n)}{n}$$

most
red1,3,7,12
measure.

d.s. operations

$$T(n) \leq 2n$$