Working of List in Python

Advantages

Random access

Cache Friendly

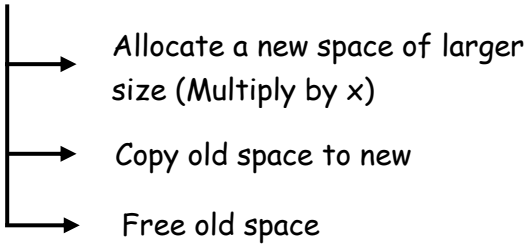
Disadvantages

Insertion, Deletion are slow

Search is also slow for unsorted

How does Dynamic size work?

- ⇨ Pre-allocate some extra space
- ⇨ If becomes full, do the following



Analysed Time

- ⇨ Initial capacity: n
- ⇨ We double the size when become full
- ⇨ Average time to append (n + 1) items = $\ominus(1)$