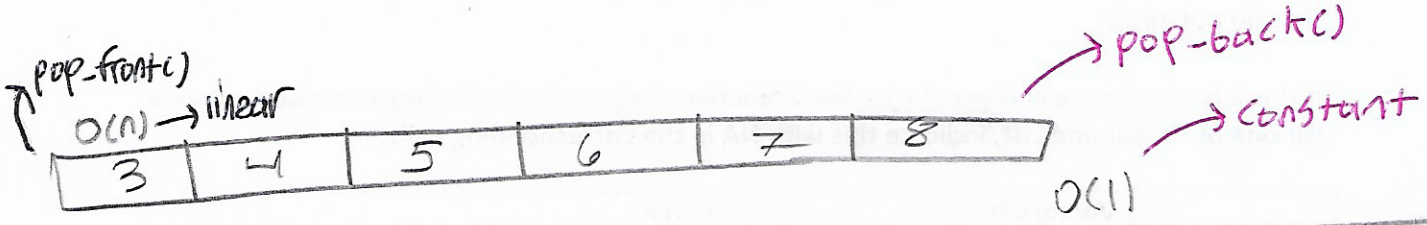
Vector <T> :: pop_front()

Pop_front() operation is an O(n) operation and would be inefficient for the Vector type. It would requiring every element to move one index forward which becomes expensive for big data sets or a data set of Millions of numbers. A List data structure would be better if you wanted to pop to the front because it is O(1).



List <T> :: operator[] (int i)

This operator could be used to access an element at index int i. For example [2] would return the value at the second index of our Vector or List. However you cannot access an element in a linked list by its index directly. One must iterate through the List until the iterator == index i. Using a Vector data structure could access the index directly and would make more sense if you needed to access data many times. O(n) operation → using Vector makes more sense ↳ O(1) operation