

1. **OUR SOLUTION:**

We suppose the list L has members: $length$ denoting the length of the list, or number of elements in the list; $data[i]$ denoting the i -th element of the list. Assuming the index starts from 1.

Therefore, just cut down the length of l to disable elements after the i -th in the list and we obtain $L.length := L.length - k$, so the elements $data[i + 1, i + 2, \dots, length]$ will be "ignored", or deleted.

Since this only requires one instruction thus the complexity has nothing to do with k , the answer should be $\Theta(1)$.

2. (a) **OUR SOLUTION:**

Solution to 2(i)

(b) **OUR SOLUTION:**

Solution to 2(ii)

(c) **OUR SOLUTION:**

Solution to 2(iii)

3. **OUR SOLUTION:**4. **OUR SOLUTION:**