## **Answers for Homework 2**

- 2. 1. O(n) means the time taken for computation in the worse case increasing linearly as the input size increases
  - 2. O(1) means the time taken for computation in the worse case does not change as the size of the input increases.
  - 3. O(log n) means the time taken for computation in the worse case changes in line with the log of the size of the input, so better than 1) but not as good as 2)
- 3. O(1) would be the best, i.e. a constant poof size.