**Cairo university faculty of engineering computer department**

**Algorithms semester fall 2018 homework 3**

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| Problem | Time Complexity | Stack Complexity | Heap Complexity |
| 1 | O(N+M) | O(1) | O(H1+H2) |
| 2 | O(N) | O(H1) | O(N) |
| 3 | O(N\*N) | O(1) | O(N) |
| 4 | O(N\*N) | O(N) | O(N\*N) |
| 5 | O(N\*N) | O(1) | O(1) |

* Mention extra Heap needed (not include input data)
* No mention for time/space for input (ex: array that contain original data)