

the complexity of time

question 1:  $O(1)$  in all functions

question 2:  $O(1)$

question 3: (1)  $O(n^2)$   $O(n^2)$  (2)  $O(n)$  (3)  $O(n^2)$  (4)  $O(n)$  (5)  $O(n \log n)$

question 4:  $O(1)$

question 5: (1)  $O(1)$  (2)  $O(n)$  (3)  $O(n)$

question 6: (1)  $O(n)$  (2)  $O(n)$

question 7:  $O(n^2)$

question 8:  $O(n \log n)$