

Personalised Learning Checklist	RAG
2.3 Algorithms	1, 2, 3
I understand analysis and design of algorithms for a given situation.	
I understand algorithms for stacks	
I understand algorithms for queues	
I understand algorithms for trees and how to apply pre, post and in order	
I understand algorithms for linked lists	
I understand algorithms for graphs depth-first (post-order) and breadth-first traversal of trees).	
I can explain the algorithm and trace binary search and linear search	
I can explain the algorithm and trace bubble sort	
I can explain the algorithm and trace insertion sort	
I can explain the algorithm and trace merge sort	
I can explain the algorithm and trace quick sort	
I can explain the algorithm and trace Dijkstra's shortest path algorithm	
I can explain the algorithm and trace A* algorithm	
I can explain the comparison of the complexity of algorithms.	
I understand measures and methods to determine the efficiency of different algorithms, Big O notation (constant, linear, polynomial, exponential and logarithmic complexity).	
I can explain the suitability of different algorithms for a given task and data set, in terms of execution time and space.	

1 - Red - I am not confident of this knowledge.

2 - Amber - I have some knowledge in this area.

3 - Green - I am very confident in this area, I have this knowledge secured.