1)asymptotic notations:

https://www.programiz.com/dsa/asymptotic-notations

2)

<https://www.hackerearth.com/practice/basic-programming/complexity-analysis/time-and-space-complexity/tutorial/#:~:text=Time%20complexity%20of%20an%20algorithm,the%20length%20of%20the%20input>.

Time complexity of an algorithm quantifies the amount of time taken by an algorithm to run as a function of the length of the input. Similarly, Space complexity of an algorithm quantifies the amount of space or memory taken by an algorithm to run as a function of the length of the input.

<https://towardsdatascience.com/space-and-time-complexity-in-computer-algorithms-a7fffe9e4683>

3)

4)tree traversal

5) <https://www.khanacademy.org/computing/computer-science/algorithms/merge-sort/a/divide-and-conquer-algorithms>

6)bst:

<https://www.javatpoint.com/binary-search-tree>

7)dfs:

<https://www.javatpoint.com/depth-first-search-algorithm>

8)merge sort

<https://www.javatpoint.com/merge-sort>

<https://www.geeksforgeeks.org/merge-sort/>

9)

<https://www.javatpoint.com/avl-tree>

<https://www.programiz.com/dsa/avl-tree>