Question #1(a) [4 points/4 points]. It was not the difficult question. We know that the number of largest node stored is b^d and we just have to put our values.

Question #1(b) [1 points/4 points] I didn't construct the sample tree and verify my work, rather just use the space complexity for this case which didn't work as expected.

Question #1(c) [0 points/4 points]: I just used the wrong formula. It should be something simple like 1 + b +b^2 + b^3 for the tree of height 3 and branching factor of 8 which will give total nodes as 585

Question #2 [4 points/5 points]:  This problem requires simple calculation; however, I forgot to put big O outside of the number just to indicate that that's the time complexity.

Question #3(a) [4 points/4 points]: Everything is correct and is simple to understand.

Question #3(b) [4 points/4 points]: It is graph because it is circular.

Question #3(c) [4 points/4 points]: Just the simple graph generated by BFS.

Question #3(d) [4 points/4 points]: Another graph generated by DFS.

Question #3(e) [4 points/4 points]: Another graph generated by Iterative Depth Search.

Question #4 (Programming): Score Function [10 points/10 points]

Question #4 (Programming): DFS functionality [8 points/8 points]

Total [42 points/50 points]

(1) What are the gaps in your learning as identified by this homework evaluation?

➔ I think I missed points because I didn't really do the recheck on my assignment. This topic are simpler to understand when you have already gone though other data structure and algorithm classes. I would say little carelessness is the reason why there is gap in learning. There were no any problem on the making the graph and I did programming assignment differently but it can be improved.

(2) What would you do to fill the identified gaps?

➔ I have to go through my data structure notes and try to learn more about the trees and graphs as well as learn more about BFS and DFS visually to better understand the concepts.

(3) What do you need from the instructor to fill the identified learning gaps?

➔ I think there is nothing specific I wanted to need from the instructor as I have already studied this concept so it's up to me to better understand and learn by myself. But, if I have trouble understanding any of this then I can always reach out to my instructor.