CSC265 Fall 2020 Homework Assignment 10

due Tuesday, December 8, 2020

1. Suppose that, during the BFS of an undirected graph $G = (V, E)$, node a is first visited before node b, which is first visited before node c. Prove that if $\{a, c\} \in E$, but $\{a, b\} \notin E$, then there exists a neighbour d of b which is visited before node a.

2. Suppose that, during the DFS of an undirected graph $G = (V, E)$, node a is first visited before node b, which is first visited before node c. Complete the following sentence and prove it is correct: If $\{a, c\} \in E$, but $\{a, b\} \notin E$, then there exists a neighbour d of b ...