

Homework 1

CMPSC 465

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Problem 1:

I did not work in a group
I did not consult without anyone my group member
I did not consult any non-class materials

Problem 2: *DFS Basics*

- a) $A, B, D, E, G, F, C, H, I$
- b) $A(1, 12), B(2, 11), D(3, 6), E(4, 5), G(7, 10), F(8, 9), C(13, 18), H(14, 17), I(15, 16)$
- c) Tree Edges: $\{(A, B), (B, D), (D, E), (B, G), (G, F), (C, H), (H, I)\}$
Back Edges: $\{(E, D)\}$
Forward Edges: $\{(A, E), (C, I)\}$
Cross Edges: $\{(G, D)\}$

Problem 3: *Pre and Post Processing*

Problem 4: *Linearization Basics*

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