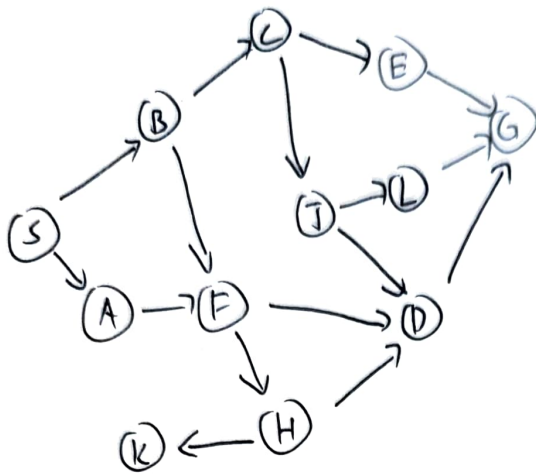


5.

Depth-First Search algorithm with tree search implementation

Ascending alphabetical order to break ties when pushing into stack (frontier)



CS3243 Assignment 1

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T03

Frontier Trace

Iter 1 = $[S(-)]$

Iter 2 = $[B(S), A(S)]$

Iter 3 = $[F(S, B), C(S, B), A(S)]$

Iter 4 = $[H(S, B, F), D(S, B, F), C(S, B), A(S)]$

Iter 5 = $[K(S, B, F, H), D(S, B, F, H), D(S, B, F), C(S, B), A(S)]$

Iter 6 = $[D(S, B, F, H), D(S, B, F), C(S, B), A(S)]$

Iter 7 = $[G(S, B, F, H, D), D(S, B, F), C(S, B), A(S)]$

Iter 8 = DONE (S, B, F, H, D, G)

Path found from S to G is S-B-F-H-D-G