

	<u>Stack</u>	<u>Visited List</u>
1	<p>→ Add starting vertex, i.e. B 's neighbors in stack to get: Stack = [A]</p> <p>→ And B becomes the current vertex in the Visited List</p>	[B*]
2	<p>→ Pop A , and check if already visited → It is <u>not</u> in the list, so mark it as visted by adding to the Visited List</p> <p>→ Add this vertex, i.e. A 's neighbors in stack to get: Stack = [S, B]</p> <p>→ Now A becomes the current vertex</p>	[B, A*]
3	<p>→ Pop B , and check if already visited → It is <u>already</u> in the list, so no need to add it back to the Visited List</p> <p>→ As B is already visited so do nothing, other than popping it out from stack Stack = [S]</p> <p>→ A is still the current vertex</p>	[B, A*]
4	<p>→ Pop S , and check if already visited → It is <u>not</u> in the list, so mark it as visted by adding to the Visited List</p> <p>→ Add current vertex, i.e. S 's neighbors in stack to get: Stack = [G, C, A]</p> <p>→ Now S becomes the current vertex</p>	[B, A, S*]
5	<p>→ Pop A , and check if already visited → It is <u>already</u> in the list, so no need to add it back to the Visited List</p> <p>→ As A is already visited so do nothing, other than popping it out from stack Stack = [G, C]</p> <p>→ S is still the current vertex</p>	[B, A, S*]
6	<p>→ Pop C , and check if already visited → It is <u>not</u> in the list, so mark it as visted by adding to the Visited List</p> <p>→ Add current vertex, i.e. C 's neighbors in stack to get: Stack = [G, S, F, E, D]</p> <p>→ Now C becomes the current vertex</p>	[B, A, S, C*]
7	<p>→ Pop D , and check if already visited → It is <u>not</u> in the list, so mark it as visted by adding to the Visited List</p> <p>→ Add current vertex, i.e. D 's neighbors in stack to get: Stack = [G, S, F, E, C]</p> <p>→ Now D becomes the current vertex</p>	[B, A, S, C, D*]
8	<p>→ Pop C , and check if already visited → It is <u>already</u> in the list, so no need to add it back to the Visited List</p> <p>→ As C is already visited so do nothing, other than popping it out from stack Stack = [G, S, F, E]</p> <p>→ D is still the current vertex</p>	[B, A, S, C, D*]
9	<p>→ Pop E , and check if already visited → It is <u>not</u> in the list, so mark it as visted by adding to the Visited List</p> <p>→ Add current vertex, i.e. E 's neighbors in stack to get: Stack = [G, S, F, H, C]</p> <p>→ Now E becomes the current vertex</p>	[B, A, S, C, D, E*]
10	<p>→ Pop C , and check if already visited → It is <u>already</u> in the list, so no need to add it back to the Visited List</p> <p>→ As C is already visited so do nothing, other than popping it out from stack Stack = [G, S, F, H]</p> <p>→ E is still the current vertex</p>	[B, A, S, C, D, E*]

11	<p>→ Pop H, and check if already visited</p> <p>→ It is <u>not</u> in the list, so mark it as visited by adding to the Visited List</p> <p>→ Add current vertex, i.e. H's neighbors in stack to get:</p> <p>Stack = [G, S, F, G, E]</p> <p>→ Now H becomes the current vertex</p>	[B, A, S, C, D, E, H*]
12	<p>→ Pop E, and check if already visited</p> <p>→ It is <u>already</u> in the list, so no need to add it back to the Visited List</p> <p>→ As E is already visited so do nothing, other than popping it out from stack</p> <p>Stack = [G, S, F, G]</p> <p>→ H is still the current vertex</p>	[B, A, S, C, D, E, H*]
13	<p>→ Pop G, and check if already visited</p> <p>→ It is <u>not</u> in the list, so mark it as visited by adding to the Visited List</p> <p>→ Add current vertex, i.e. G's neighbors in stack to get:</p> <p>Stack = [G, S, F, S, H, F]</p> <p>→ Now G becomes the current vertex</p>	[B, A, S, C, D, E, H, G*]
14	<p>→ Pop F, and check if already visited</p> <p>→ It is <u>not</u> in the list, so mark it as visited by adding to the Visited List</p> <p>→ Add current vertex, i.e. F's neighbors in stack to get:</p> <p>Stack = [G, S, F, S, H, G, C]</p> <p>→ Now F becomes the current vertex</p>	[B, A, S, C, D, E, H, G, F*]
15	<p>→ Pop C, and check if already visited</p> <p>→ It is <u>already</u> in the list, so no need to add it back to the Visited List</p> <p>→ As C is already visited so do nothing, other than popping it out from stack</p> <p>Stack = [G, S, F, S, H, G]</p> <p>→ F is still the current vertex</p>	[B, A, S, C, D, E, H, G, F*]
16	<p>→ Pop G, and check if already visited</p> <p>→ It is <u>already</u> in the list, so no need to add it back to the Visited List</p> <p>→ As G is already visited so do nothing, other than popping it out from stack</p> <p>Stack = [G, S, F, S, H]</p> <p>→ F is still the current vertex</p>	[B, A, S, C, D, E, H, G, F*]
17	<p>→ Pop H, and check if already visited</p> <p>→ It is <u>already</u> in the list, so no need to add it back to the Visited List</p> <p>→ As H is already visited so do nothing, other than popping it out from stack</p> <p>Stack = [G, S, F, S]</p> <p>→ F is still the current vertex</p>	[B, A, S, C, D, E, H, G, F*]
18	<p>→ Pop S, and check if already visited</p> <p>→ It is <u>already</u> in the list, so no need to add it back to the Visited List</p> <p>→ As S is already visited so do nothing, other than popping it out from stack</p> <p>Stack = [G, S, F]</p> <p>→ F is still the current vertex</p>	[B, A, S, C, D, E, H, G, F*]
19	<p>→ Pop F, and check if already visited</p> <p>→ It is <u>already</u> in the list, so no need to add it back to the Visited List</p> <p>→ As F is already visited so do nothing, other than popping it out from stack</p> <p>Stack = [G, S]</p> <p>→ F is still the current vertex</p>	[B, A, S, C, D, E, H, G, F*]

20	<p>→ Pop S, and check if already visited</p> <p>→ It is <u>already</u> in the list, so no need to add it back to the Visited List</p> <p>→ As S is already visited so do nothing, other than popping it out from stack</p> <p>Stack = [G]</p> <p>→ F is still the current vertex</p>	[B, A, S, C, D, E, H, G, F*]
21	<p>→ Pop G, and check if already visited</p> <p>→ It is <u>already</u> in the list, so no need to add it back to the Visited List</p> <p>→ As G is already visited so do nothing, other than popping it out from stack</p> <p>Stack = []</p> <p>→ The stack is empty and all the vertices have been traversed, so the traversal ends here, & the final order of visited list is: [B, A, S, C, D, E, H, G, F]</p>	[B, A, S, C, D, E, H, G, F]