

1 → 2 → 3 → 4 → 5 → 6

7 → 8 → 9 → 10

11 → 12

Stack [1]

Result → empty.

① ↖ out

Stack [2]

Result = [1 → 2]

② ↖ out.

Stack [3]

Result = [1 → 2 → 3]

③ ↖ out

Stack [4, 7] → child goes in first

Result = [1 → 2 → 3 → 7]

④ ↖ out

Stack [4, 8]

Result = [1 → 2 → 3 → 7 → 8]

⑤ ↖ out

Stack [4, 9, 11] child goes in

Result = [1 → 2 → 3 → 7 → 8 → 11]

⑥ ↖ out

Stack [4, 9, 12]

Result = [1 → 2 → 3 → 7 → 8 → 11 → 12]

no next / no child  
linking back.

⑦ ↖ out

Stack = [4, 9]

Result = [1 → 2 → 3 → 7 → 8 → 11 → 12] → 9

Same

⑧ ↖ out

Stack = [4, 10]

Result = [1 → 2 → 3 → 7 → 8 → 11 → 12 → 9] → 10

no next / no child

⑨ ↖ out

Stack = [4, 11]

Result = [1 → 2 → 3 → 7 → 8 → 11 → 12 → 9 → 10 → 4]

⑩ ↖ out

Stack = [5]

Result = [1 → 2 → 3 → 7 → 8 → 11 → 12 → 9 → 10 → 4 → 5]

⑪ ↖ out

Stack = [5, 6]

Result:

1 → 2 → 3 → 7 → 8 → 11 → 12 → 9 → 10 → 4 → 5