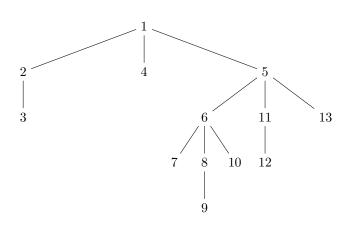
NOTES ON STACKS AND DEPTH FIRST SEARCH

ERIC MARTIN



Popping a path from the top of the stack (right of list) and pushing its extensions to the top of the stack.

[1]

$$\big[[1,5],[1,4],[1,2]\big]$$

$$\big[[1,5],[1,4]\big] \hspace{3cm} [1,2]$$

$$[[1,5],[1,4]]$$
 $[1,2,3]$

$$[[1,5]] [1,4]$$

$$[] \hspace{1cm} [1,5]$$

$$[[1,5,13],[1,5,11]] [1,5,6]$$

$$\big[[1,5,13],[1,5,11],[1,5,6,10],[1,5,6,8],[1,5,6,7]\big]$$

$$[[1,5,13],[1,5,11],[1,5,6,10],[1,5,6,8]]$$
 [1,5,6,7]

$$\begin{bmatrix} [1,5,13], [1,5,11], [1,5,6,10] \end{bmatrix}$$

$$\begin{bmatrix} [1,5,6,8] \end{bmatrix}$$

$$\begin{bmatrix} [1,5,13], [1,5,11], [1,5,6,10], [1,5,6,8,9] \end{bmatrix}$$

$$[[1,5,13],[1,5,11],[1,5,6,10]]$$
 $[1,5,6,8,9]$

$$[[1,5,13],[1,5,11]]$$
 $[1,5,6,10]$

$$\big[[1,5,13]\big] \hspace{3.1cm} [1,5,11]$$

$$[1,5,13]$$
 $[1,5,11]$ $[1,5,11]$

$$[[1,5,13]] [1,5,11,12]$$

[1, 5, 13]

COMP9021 Principles of Programming

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