Problem:
Professor Bacon claims that the algorithm for strongly connected components would be simpler if it used the original (instead of the transpose) graph in the second depth-first search and scanned the vertices in order of increasing finishing times. Does this simpler algorithm always produce correct answer?

Solution:
考慮

這個演算法不對。
考慮上圖，第一次 DFS 得到 finished time 會得到 \( f(1) < f(2) < f(0) \)，第二次 DFS 會得到 \( 0 \rightarrow 1 \rightarrow 2 \)，將三個點全部包進去，跟正確答案不一樣(正確答案：\( \{0, 1\}, \{2\} \))