The first few steps in a DFS of REACT graph

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| 1. Word length max = 3 2. Start with vertex 1 and do a DFS from there 3. Diagrams below start with DFS having arrived at word length 3 and built the word “rer” | A diagram of a network  AI-generated content may be incorrect. |

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| * Hit length limit of 3 * Word = “rer” * Next step, backtrack to vertex 2 | * From vertex 2, select incident vertex 3 and traverse to it * Hit length limit of 3 * Word = “rea” * Next step, backtrack to vertex 2 | * From vertex 2, select incident vertex 4 and traverse to it * Hit length limit of 3 * Word = “rec” * Next step, backtrack to vertex 2 | * From vertex 2, select incident vertex 5 and traverse to it * Hit length limit of 3 * Word = “ret” * Next step, backtrack to vertex 2 |

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| * But when we get back to vertex 2, there are no more incident vertices * So, backtrack to vertex 1 * From vertex 1, select incident vertex 3 and traverse to it * Word = “ra” * Continue with DFS on vertex 3’s incident vertices, which are {2,1,5,4} |