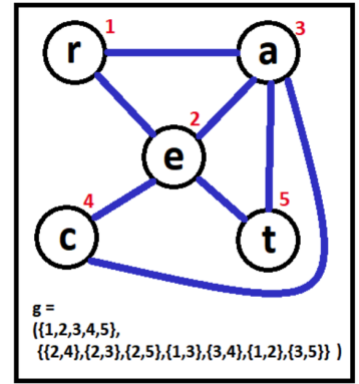


The first few steps in a DFS of REACT graph

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"



<ul style="list-style-type: none"> • Hit length limit of 3 • Word = "rer" • Next step, backtrack to vertex 2 	<ul style="list-style-type: none"> • From vertex 2, select incident vertex 3 and traverse to it • Hit length limit of 3 • Word = "rea" • Next step, backtrack to vertex 2 	<ul style="list-style-type: none"> • From vertex 2, select incident vertex 4 and traverse to it • Hit length limit of 3 • Word = "rec" • Next step, backtrack to vertex 2 	<ul style="list-style-type: none"> • From vertex 2, select incident vertex 5 and traverse to it • Hit length limit of 3 • Word = "ret" • Next step, backtrack to vertex 2

<ul style="list-style-type: none"> • But when we get back to vertex 2, there are no more incident edges • 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}