Because this assignment is to study two cases: no circle and circle. I designed a random directed graph generation method. Add a random edge each time from the empty map. When the number of edges is greater than 15, get the topological DFS ordering each time. This shows the process from no circle to circle.

1) Have circle cases:

A screenshot of a computer

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2) From no circle to circle case:

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Stop here because a circle is found.