Detect a cycle DFS undirected -) BFS / DFS Cycle Detection -> Undirected Direct ed _(v(s) - (path vis) Josh Algorithms: 1) Topological 2011— DACR CLinear Ordeling) (1) Kahn's Algorithm (Indegree) * Shortest distance -> Dijketra's -> MST-> Painie -> MS T-> Kruskalie (Disjoint) Topological Sort: > Directed Acyclic York * Linear Ordering Et nodes or vertices Such that I of som a to V, Join the ordering y Comes first before 4 comes before V ahray & 4 ->6 Topological Soot Algo: -) Topological Sort > Kahn's Algorithm linear ordering 0/884,5,0,2,3,1 12 1 1 0 0 Indegree of adjacent 0 1 2 3 4 5 Indegree vode queue Indegree: It is the number of incoming hodes to a particular mode. Important point about Topo Soot > DAC Linear Ordering. *** Interview O nostion : > If we cannot apply to bo sort to a disected graph, what does it mean? > Cycle Detected !!! DCa * when we are done with the lineal ordering topo sort is of and / vector. size () == 000 Mind Tree / Tech Mahindea / True Storage / Amazon Visa 1 Standard Chartend / Wipro Cycle detection in (Directed Cyclic Graph)
using Topo Soit BFS tak "is Algorithm

1 3 3 15 nowle Adj list TP. Size() == V] 1 TP. Size() ! = V 3 - 4,5 Indegrel Shootest Distance Algos: (Shortest Path from Sxc to all other nodes) Diskstra's Algorithm * quene * poiosity-quene * set Adj List: > (N, W) Src/ 213+W Feedback: 11316