to solve depth ABBERD -: MIA peroegeram receate a Algoenthim frest dearch

ALGORITHM:

- 1. Intratize reflicted set:
- -> create an empty set 'visited' to keep terack of resisted node.
- -> Ask the user the number of rodes in exaph. 2. weekte the graph:
- -> For each node, ask the user to input the made's neighbour (adjacent modes) and store the Enformation in directory yearsh.
- -> Define a ucursive function des (visited, eyegh, rode): 3. DFS function:
 - * whech if node is resisted.
- -> If the node is not in the related then set proceed.
 - -> Peant the node and add it to visited set * velsit the mode.
 - * Recursively relait neighbous.
 - -> Fou each neighbourd in graph [rods] call off [visited, egraph, neighbour] recursively.
- 4. Ataent DFS:-
- Ask the uses to input the starting node.
- -> call the dise; function with the wesited set yearth and start node.
- The DF3: teranousal is complete when all weachable modes from the stant rate have been wishted.

AB ABE ABEF (D) B ABEFD ABEFDC 11 - 1-1-101 Mg Algoritin ABEFDC 1. Intellige william pool Explain us ifines & s det die une her her her let resident the door about it is 174 motor pure linear provide providen a part sofe matica in mine tony spira afe consisted graph so to Str Stene flores - Daties or sucuries from the related the to slick afrede 3 orated on four of your My to c net proceed. the listing of S * VIGH AN meli-A D 61 1800 My 201800 2018 * 8 A · Papel 1870 1006 Ces See AD 01 61 E D A should st AD OIL E DOIEBFC SETT Long A specificate a coher of accordable species from the esteriot not not now balan palat.

code:def de (visited) graph, node): If node is not in wasted: peant (node) visited. add (rode) for neighbows in graph [node] ofs (visited, egraph, reighbour) def cereate = graph () in you wood wind. It was in ejeraph = \$ 2 num-nodes - int (input ("Enter no of nodes in graph: ")) for in erange Chum-noches node = input ("Enter the node:") neighbours = input (+" Enter the neighbours of Snode 3 separated by space: "). sphit () syraph [node] = neighbours 4. Chelioce statuen ejeraph respited = set () eyraph = cecate-yeaph () start-nock = input ("Enter the starting rode:"): Peant ("Following is the Depth First Granch") offs (visited, yeaph, start - node) SAPERTC. That: the DES periodicen is execute and acadjust in accepted accordingly lays

Output: Enter the number of modes in yearsh: 8 Enter the nade: S Entre the neighbours deprate ley spaces a b. c Enter the made of Enter the mightoner depends by depose: 8 d Enter the node: of Enter the neighbour sepreate by spaces a g Enter An note: 9 Enter the nelighboury Deperate by space: D. F. F. Enter Au node: E Enter the neighbour Separate by Space: On B. Enter the rode: B Enter the neighbour seprate by space: E3 Entro Ah nadi: c Enter the neighbour deposite by space. Enter the hode: to seprate by space: con Enter the neighbour Enter the starting rode: S following is the depth first search. SADGEBFC.

RESULT:Thus, the DES presegram is executed
and output is received successfully.