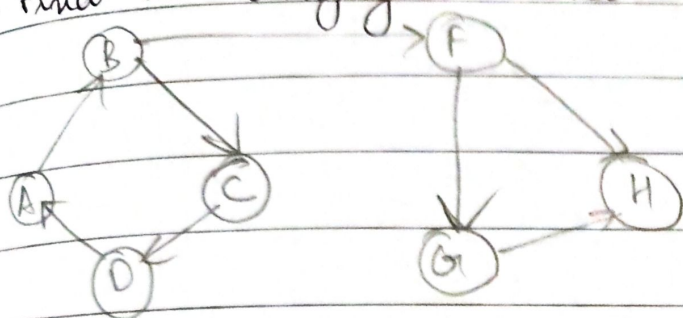


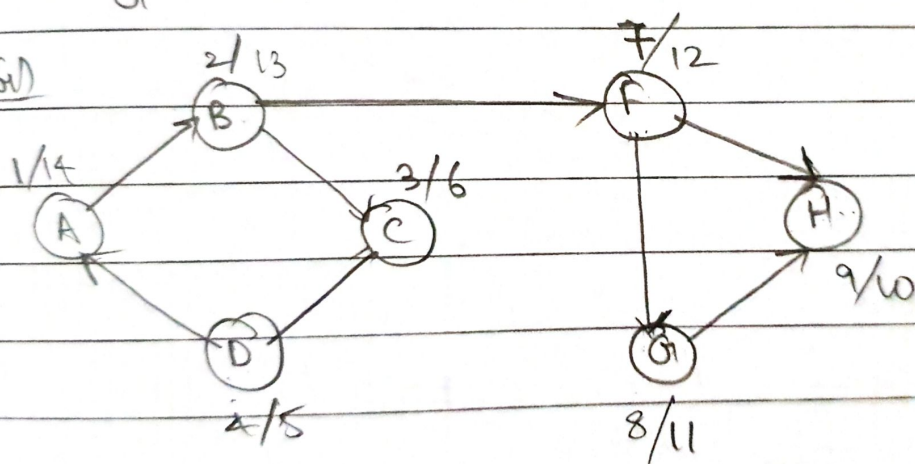
09.04.2020

13. Find the strongly connected components of the digraph given below:



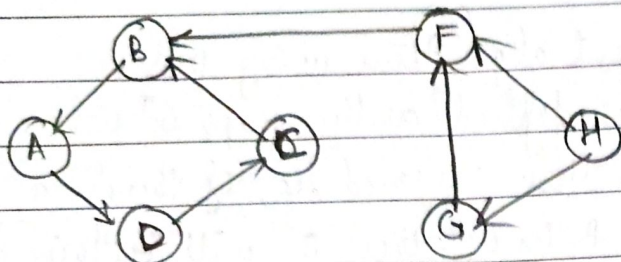
$G$

• DFS( $G$ )



A
B
F
G
H
C
D

•  $G^T$



explore each vertex in decreasing order of finish time =  
A, B, C, G, H, E, D

(i)  $\text{DFS}(A)$

$A \rightarrow D \rightarrow C \rightarrow B$

(ii)  $\text{DFS}(E)$

F

(iii)  $\text{DFS}(G)$

H

(iv)  $\text{DFS}(H)$

F

$\therefore$  The 4 strongly connected components of the graph are:

(i) ABCD

(ii) F

(iii) G

(iv) H

