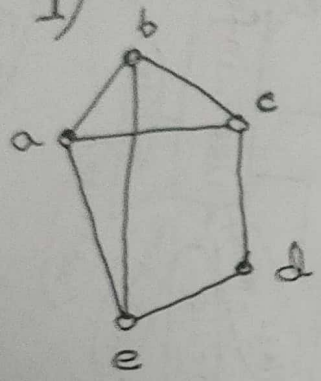
ABID ALI
2019380141

Exercise - 10.5

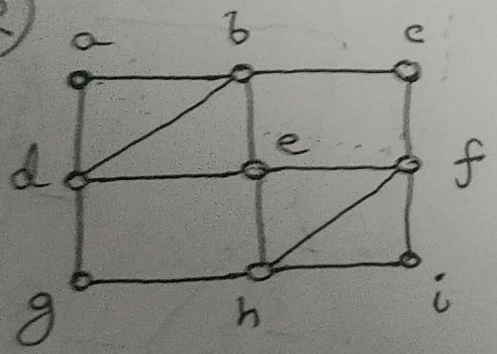
1)



euler circuit : not exist ;
the graph doesn't have any euler circuit & any euler path.

euler circuit : not exist;

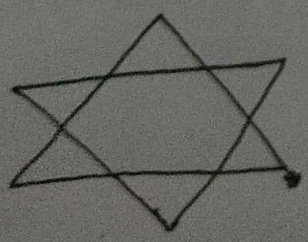
2)



euler circuit : exists

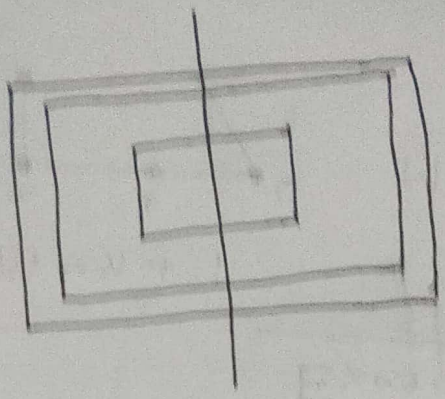
a → b → c → f → e → d → g → h → i → f → h → e → b → d → a

13)

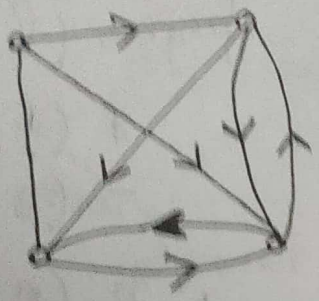


yes

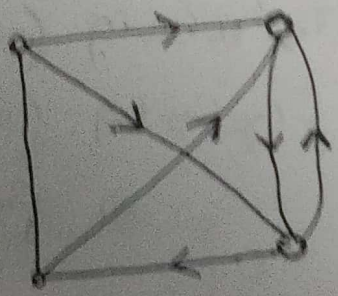
17)



18)

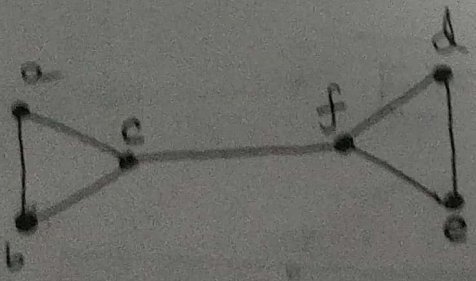


eulercircuit : not exist
euler circuit: exist
euler path: a, b, d, c, a, d, b, c, d



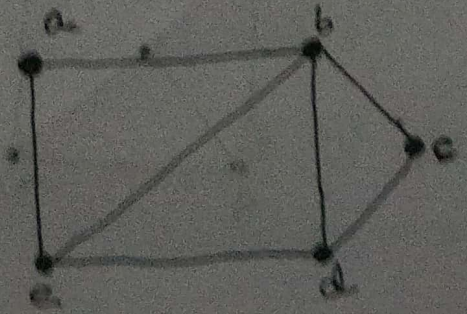
euler circuit : not exist
euler path : not exist

30)



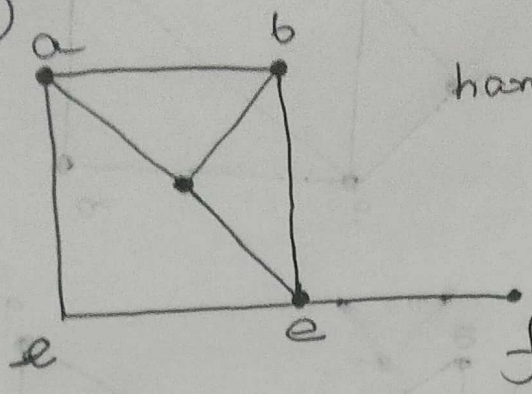
hamilton circuit : doesn't exist
(have to go through 'c' & 'f' twice to make a circuit to make a circuit)

31)



hamilton circuit : exist
a, b, c, d, e, a

32)



hamilton circuit: not exist

Exercise-11.1

(1) a, c, e are trees

(3) a) a

b) b, c, d, f, h, g, q, t

c) l, m, n, o, p, s, u, r, e, g, i, k

d) q, r

e) c

f) p

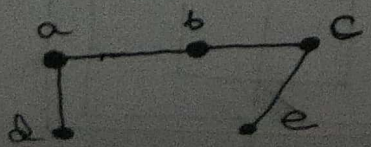
g) a, b, f

h) e, f, l, m, n

Exercise-11.4

(1) $m - n + 1$

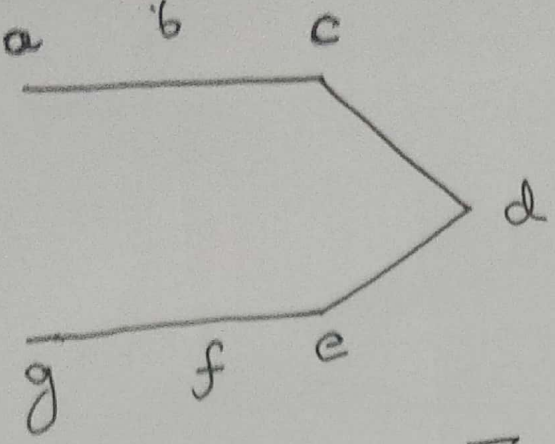
(2)



Minimum number of edges

$5 - 1 = 4$

3)

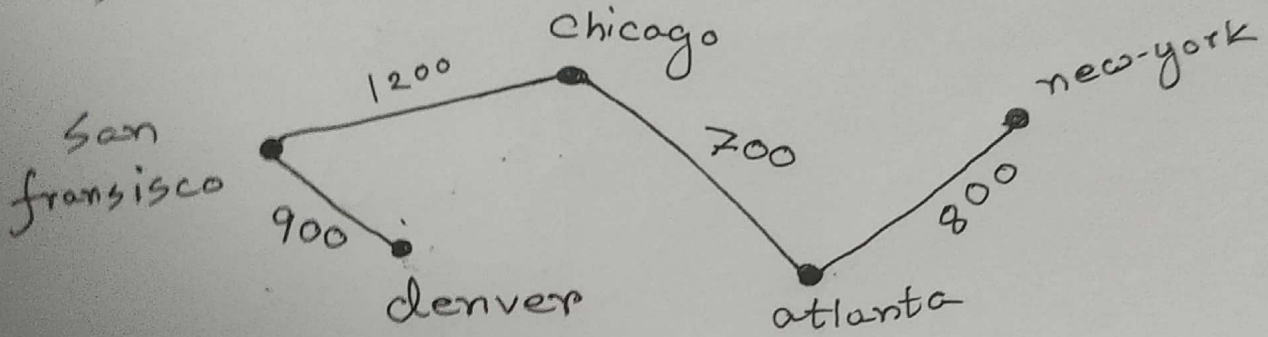


8 edges must be removed

6 minimum number of edges

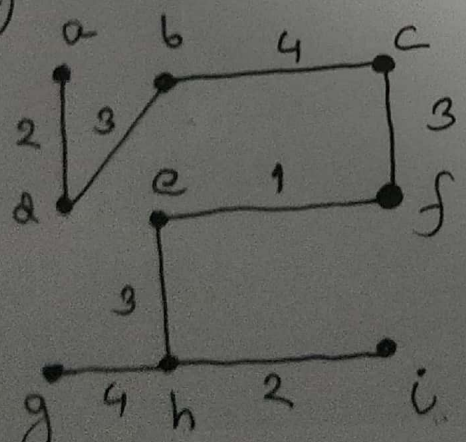
Exercise -11.5

5)



4 minimun edges

7)



{e, f}, {a, d}, {h, i}, {b, d}, {e, f}, {e, h}, {b, c}, {g, h}

8 minimum edges