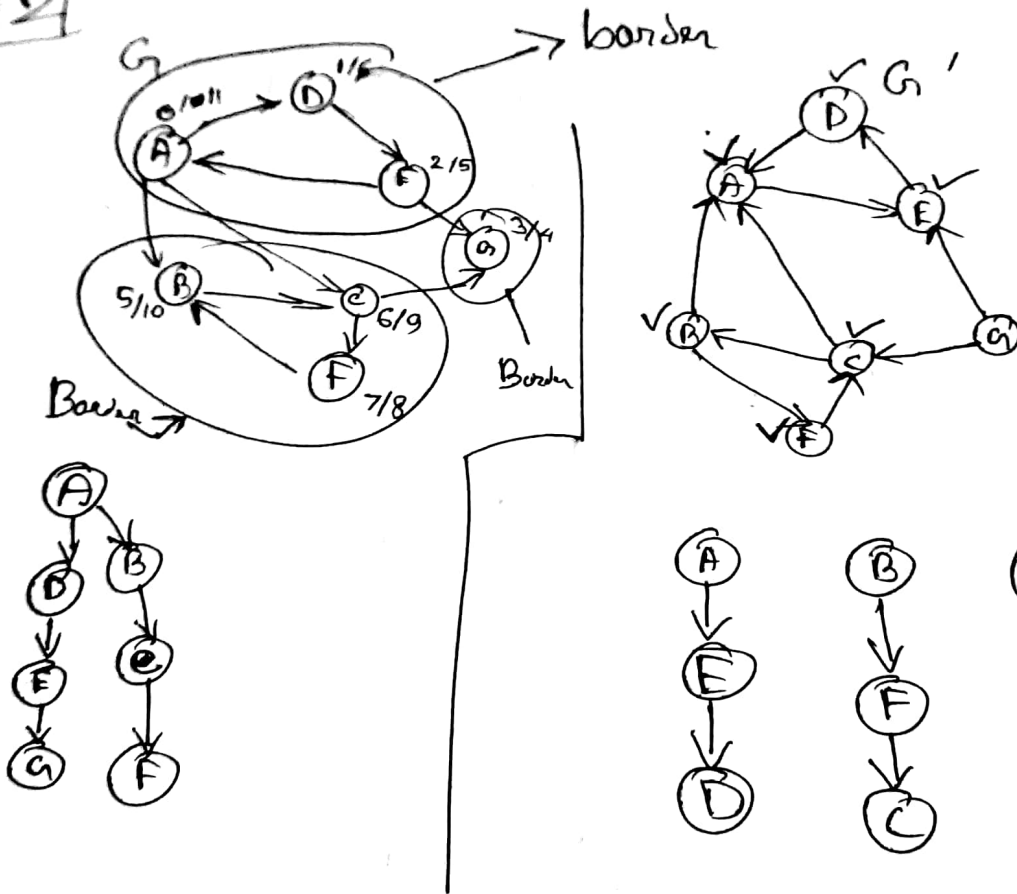


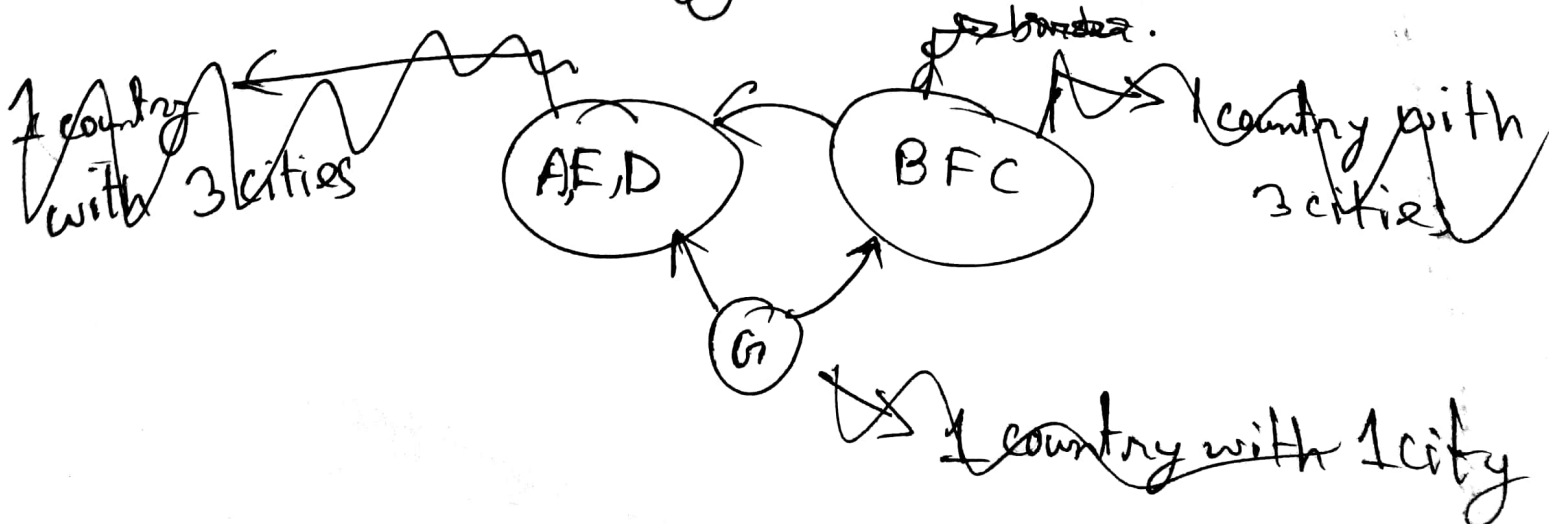
MID Solve

MID SUM17

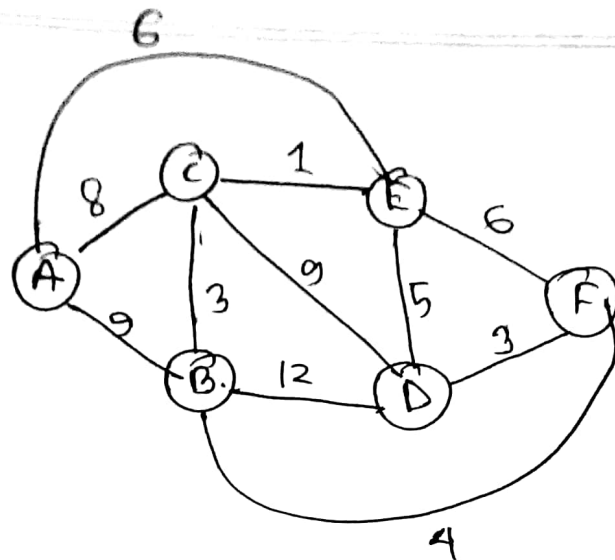
2/



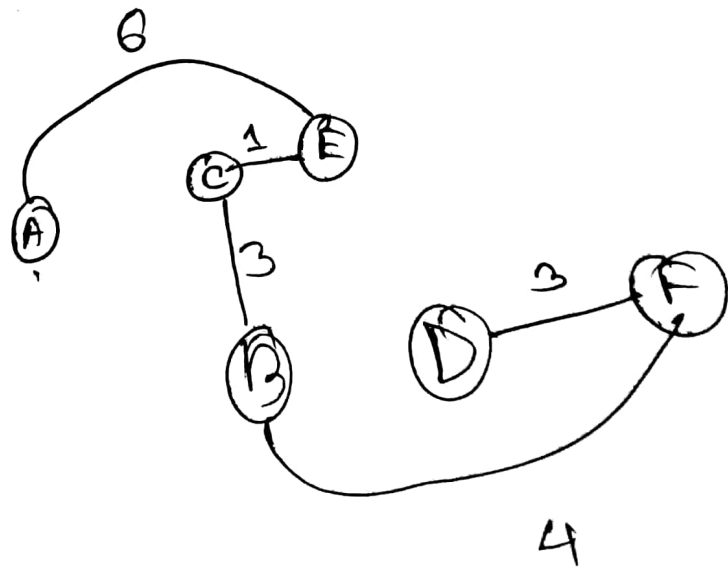
Strongly connected graph



Fall 15
Q71



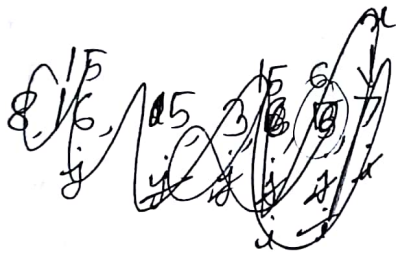
Location	Key	Parent	Tree
✓A	∞	1/9/8/6	False True
✓B	∞	1/4/12	False True
✓C	∞	1/9/3	False True
✓D	∞	1/3/1	False True
✓E	∞	1/6/5/1	False True
✓F	∞	1/3/4	False True



Prim's time complexity

Q31

8 16 15 3 6 5 7



3 6 5 8 16 15 7
 x x x x x x x

3 6 5 7 8 16 15

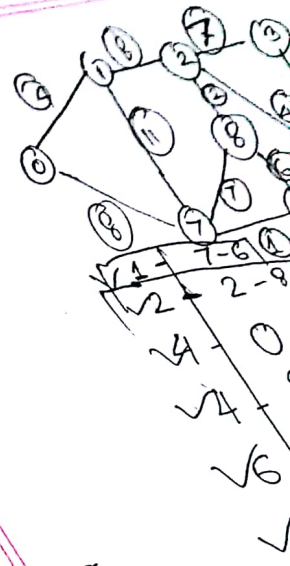
3 6 5

3 5 6

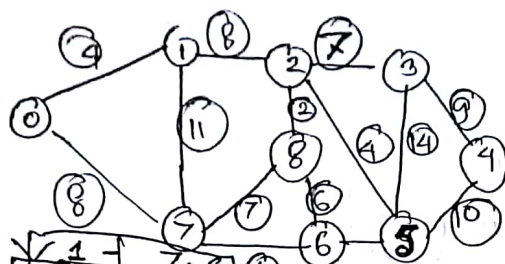
8 16 15

8 15 5 16

$\log_2(7) = 2.80$
 so we see we used height of 3.



~~1657~~
 Minimum Cost
 > 41



✓1	7-6
✓2	2-8
✓4	0-1
✓4	2-5
✓6	8-6
✓7	2-3
✗7	7-8
✓8	0-7
✗8	1-2
✓9	3-4
✗10	5-4
✗11	1-7
✗14	3-5

{0}, {1}, {2}, {3}, {4}, {5},
 {6}, {7},
 {8}

{0, 1} {2, 8} {3, 4} {7, 6}

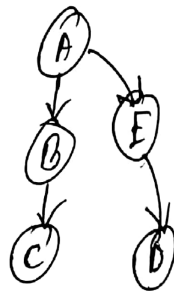
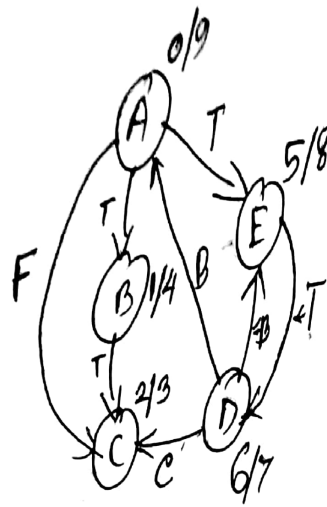
{0, 1} {2, 5, 8, 6}, {7}, {4}

{0, 1, 2, 3, 5, 6, 7, 8} {4}

{0, 1, 2, 3, 4, 5, 6, 7, 8}

~~AA57~~
 Minimum Cost
 41

Q.5
51



Q.8

