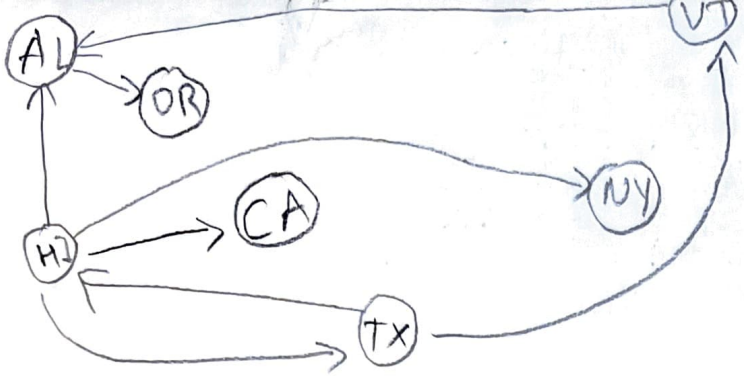
1.



1. V(State Graph) = {Alaska, California, Hawaii, New York, Oregon, Texas, Vermont}
   E(State Graph) = {(Alaska, oregon)(Hawaii, Alaska)(Hawaii, California)(Hawaii, NewYork)
   (Hawaii, Texas)(Texas, Hawaii)(Texas, Vermont)(Vermont, Alaska)(Vermt, Calif

2. a) No
   b) Yes
   c) Texas

3. a)

States	AL	CA	HI	NY	OR	TX	VT
AL	0	0	1	0	0	0	1
CA	0	0	1	0	0	0	1
HI	0	0	0	0	0	0	0
NY	0	0	0	0	0	0	0
OR	1	0	0	0	0	0	0
TX	0	0	1	0	0	0	0
VT	0	0	0	0	0	1	0

b) AL → OR →

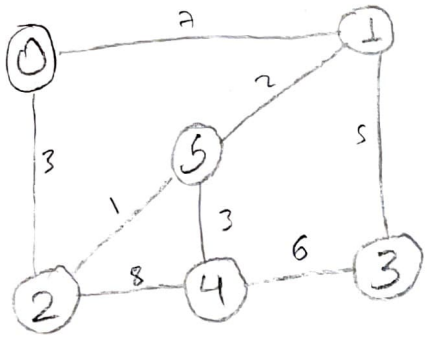
CA →
HI → AL → CA → NY → TX →
NY →
OR →
TX → HI → VT →
VT → AL → CA →

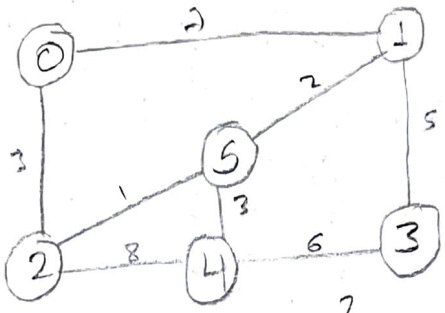
4. A) Answer: c) E G A D F C B

b) Answer: A) F, C, D, A, B, E, G

5, Atlanta → Austin = 2100
Atlanta → Chicago = 2800
Atlanta → dallas = 1900
Atlanta → denver = 2680
Atlanta → houston = 800
Atlanta → Washington = 600

6,





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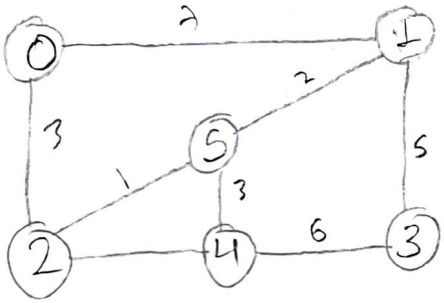

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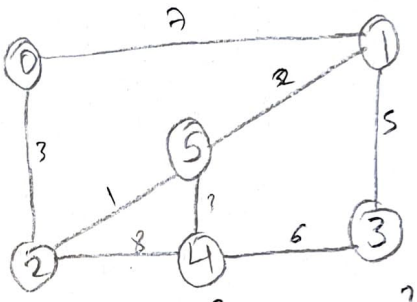

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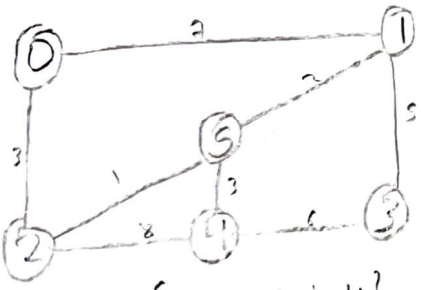

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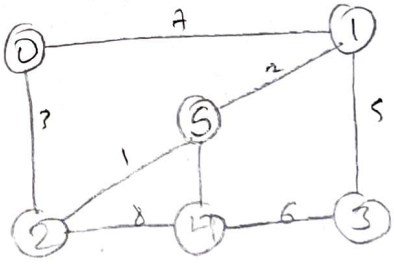

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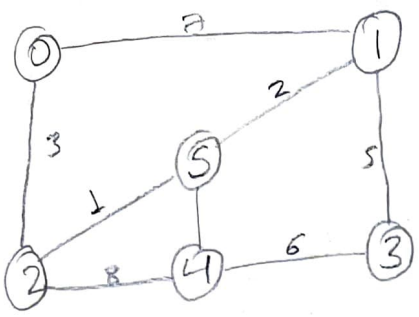

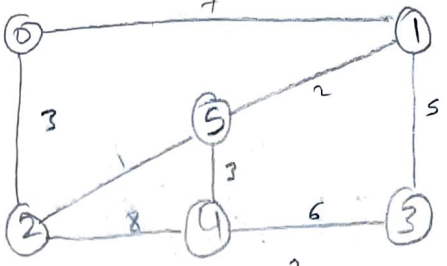

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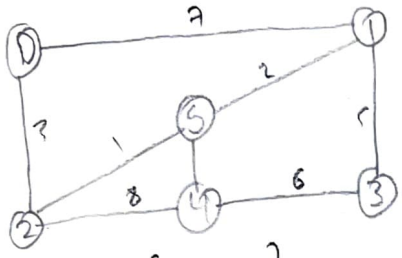

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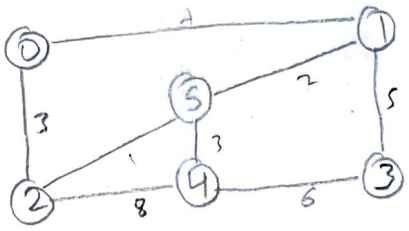

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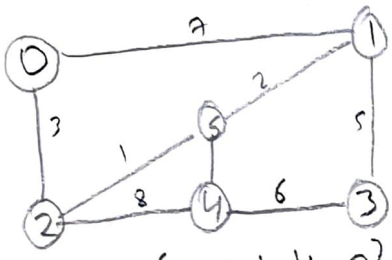

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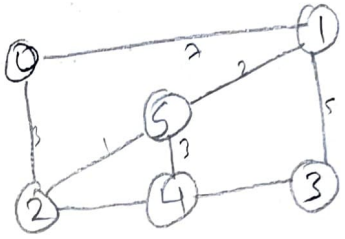

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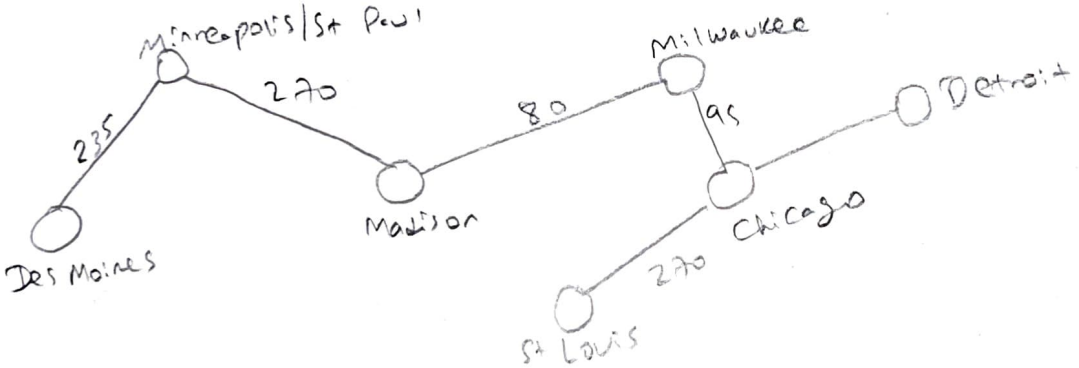

, Topological = 0, 5, 1, 8, 6, 3, 2, 4, 9, 7

0, Breadth First Topological:

Start, Programming1, Discrete Math, Computer Organization, Programing 2, Operations Systems, High Level languages, Algorithms, Senior Seminar, Theory of Computation, end.