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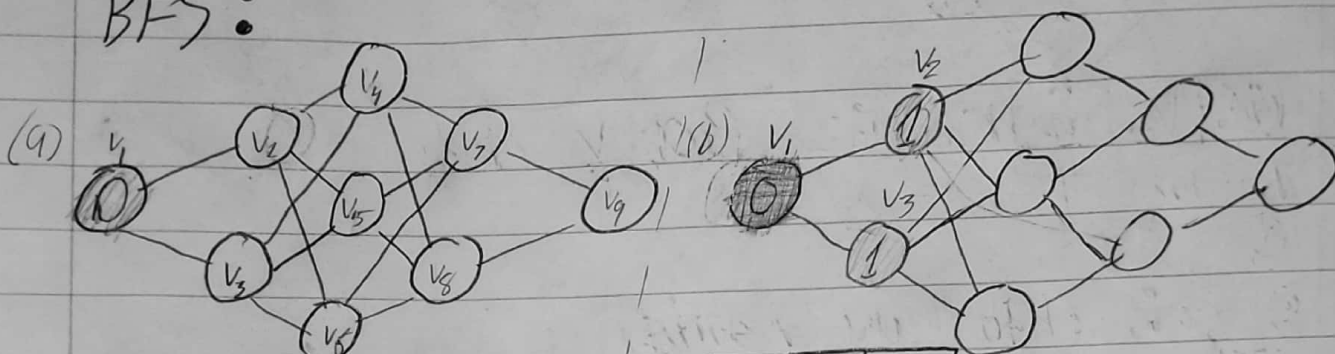
Adam Cam

(1)

HW4 Final Draft

Problem 1

1)
BFS:



Q:

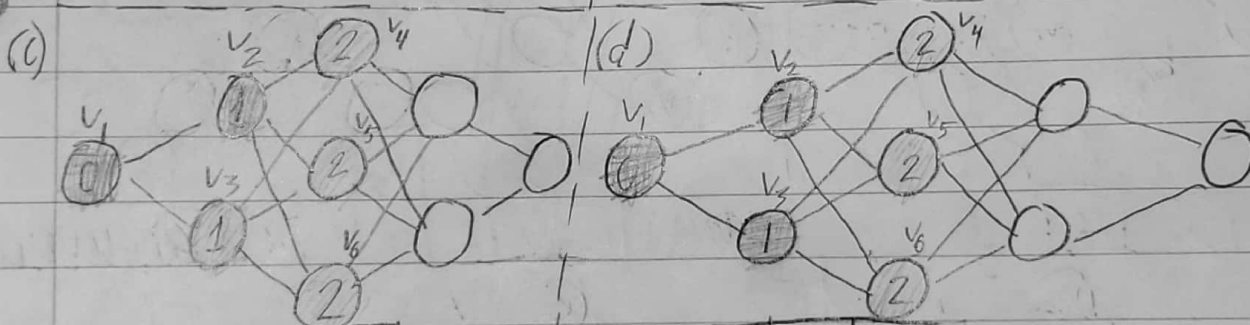
v_1

0

Q:

v_2	v_3
-------	-------

1 1



Q:

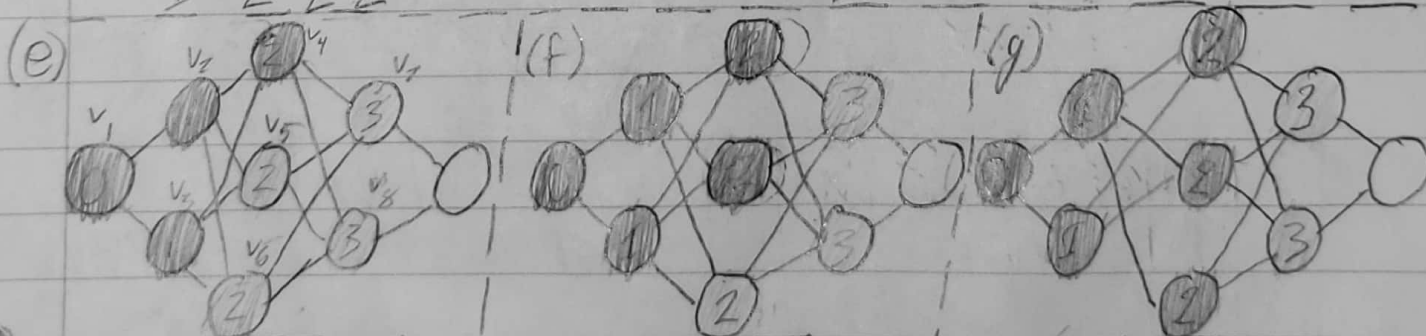
v_3	v_4	v_5	v_6
-------	-------	-------	-------

1 2 2 2

Q:

v_4	v_5	v_6
-------	-------	-------

2 2 2



Q:

v_5	v_6	v_7	v_8
-------	-------	-------	-------

2 2 3 3

Q:

v_6	v_7	v_8
-------	-------	-------

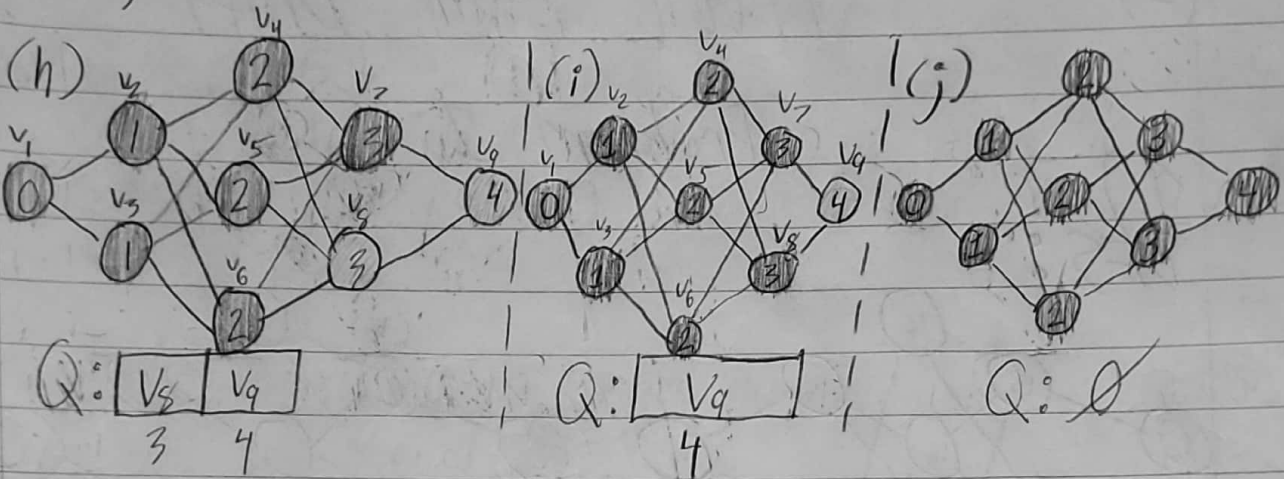
2 3 3

Q:

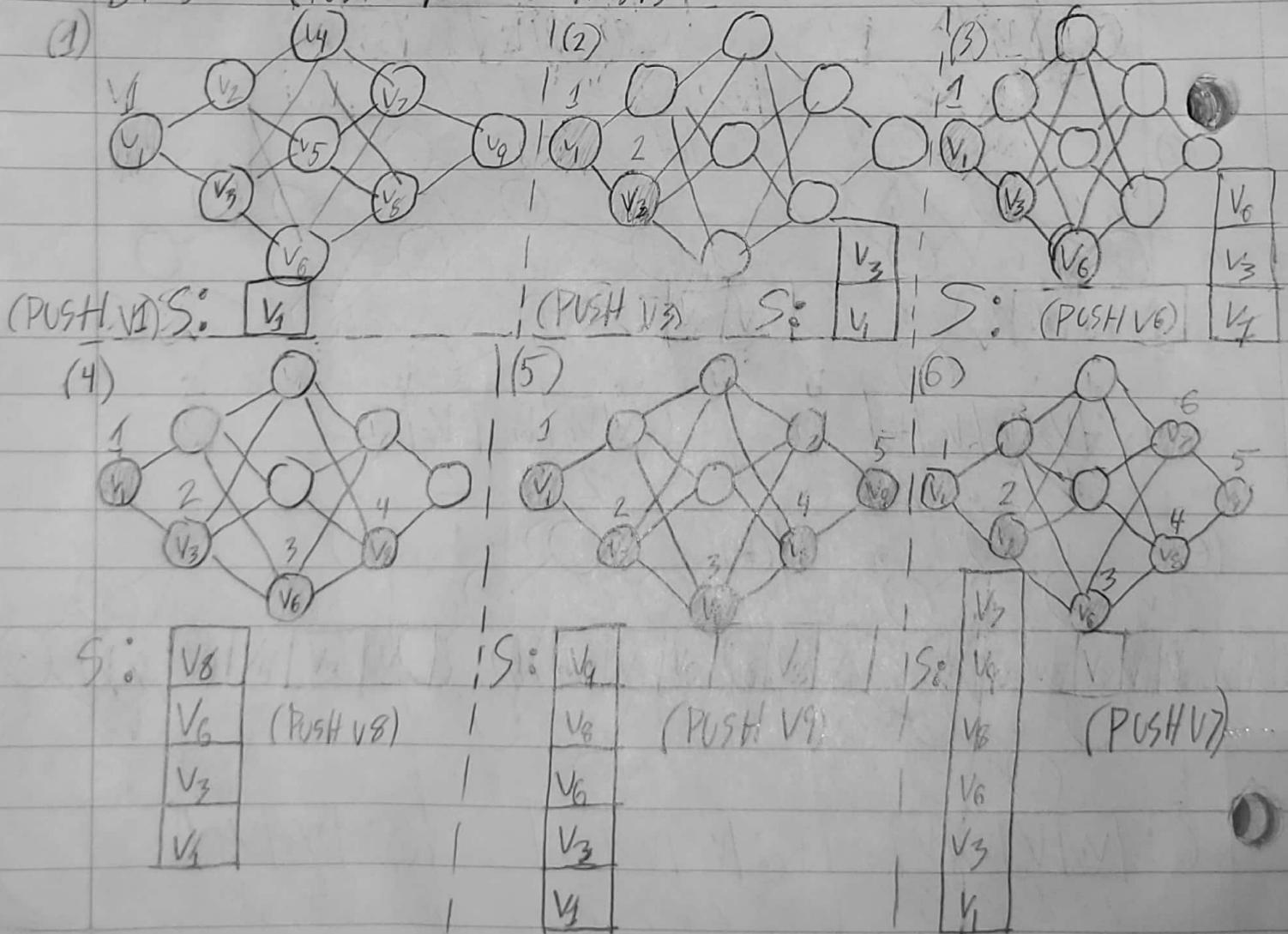
v_7	v_8
-------	-------

3 3

(2)

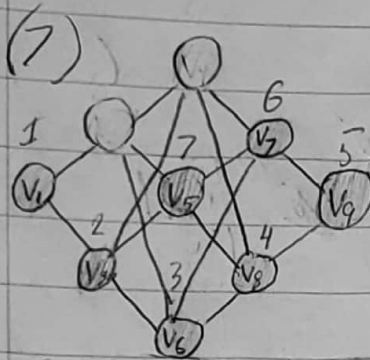


DFS: (Push highest one first)



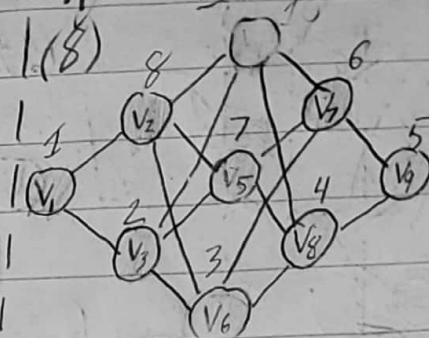
(3)

HW4 Final Draft



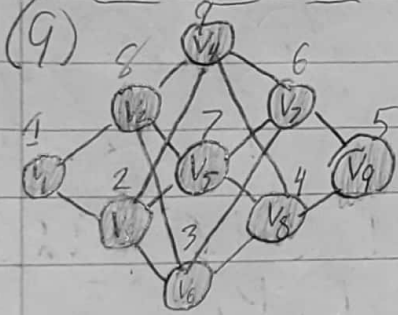
(PUSH V5)

V5
V7
V9
V8
V6
V3
V1



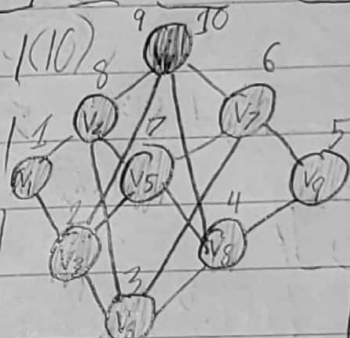
(PUSH V2)

V2
V5
V7
V9
V8
V6
V3
V1



(PUSH V4)

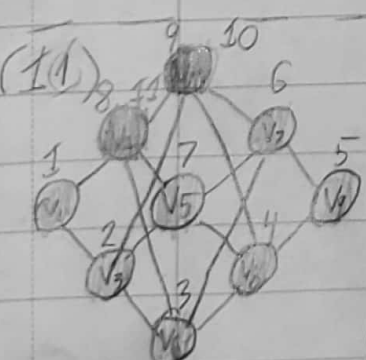
V4
V2
V5
V7
V9
V8
V6
V3
V1



(POP V4)

V2
V5
V7
V9
V8
V6
V3
V1

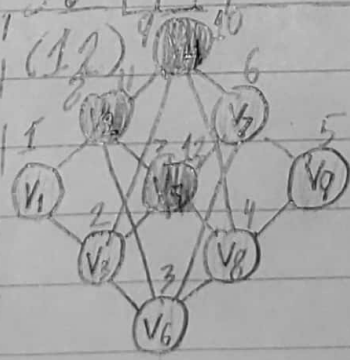
S:



(POP V2)

V5
V7
V9
V8
V6
V3
V1

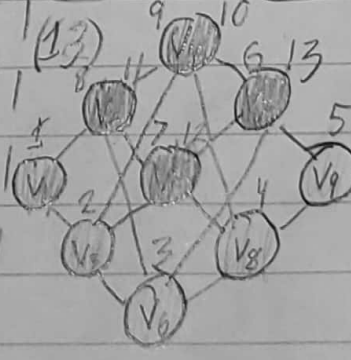
S:



(POP V5)

V7
V9
V8
V6
V3
V1

S:

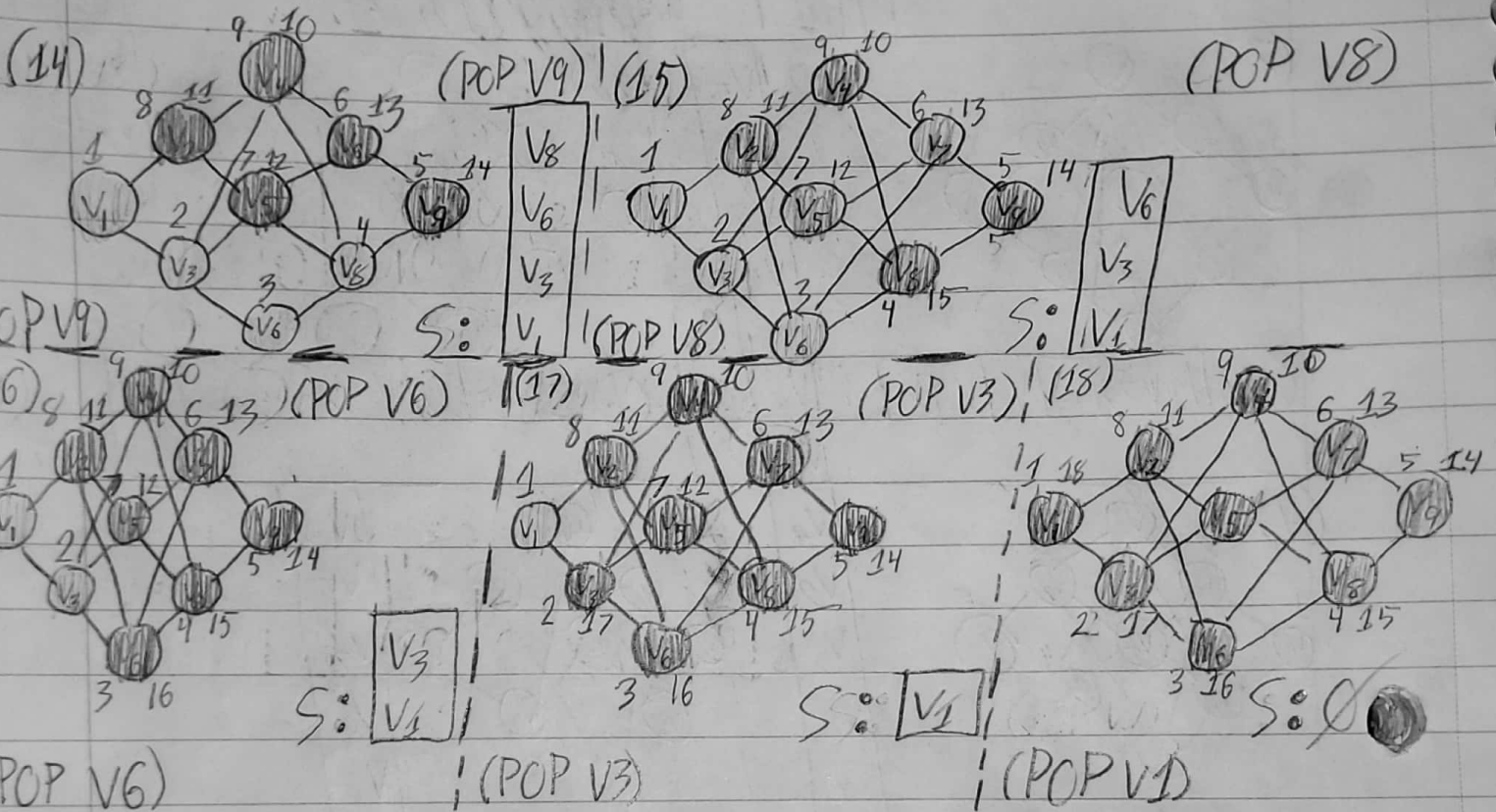


(POP V7)

V9
V8
V6
V3
V1

S:

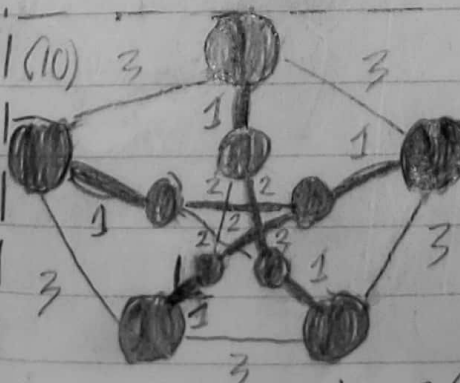
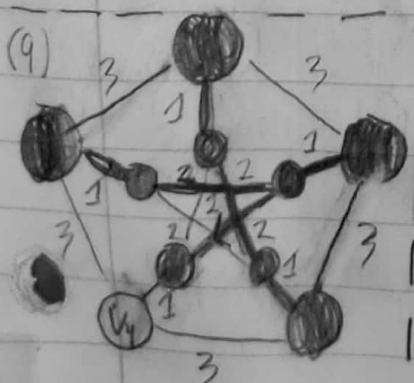
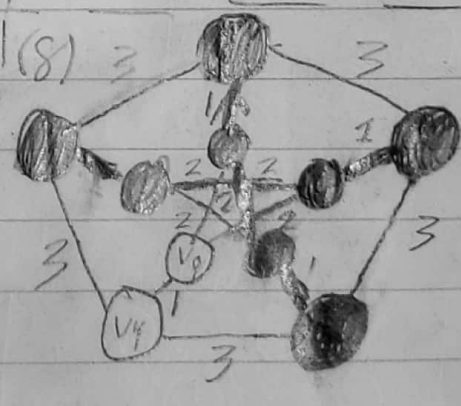
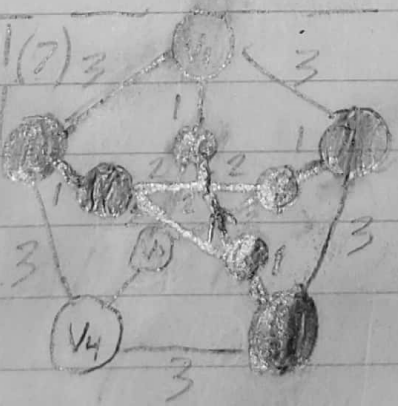
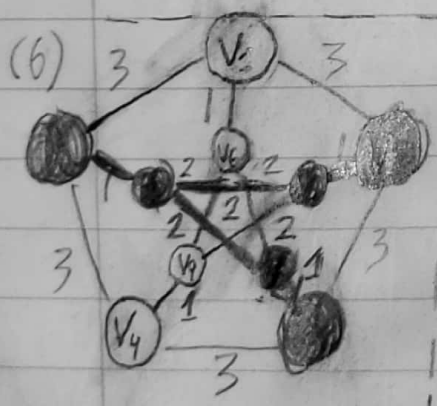
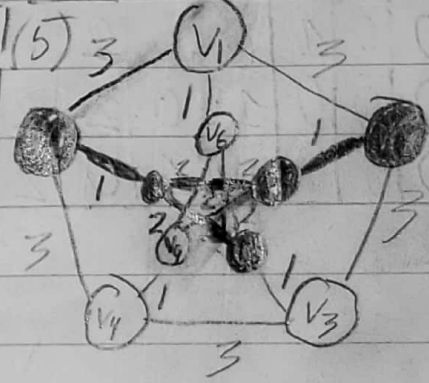
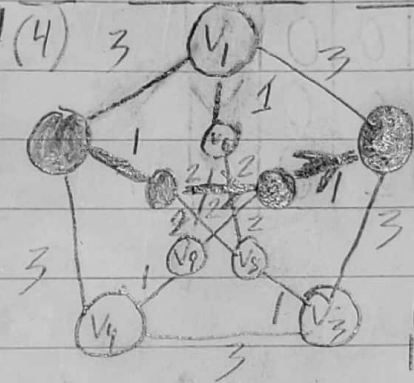
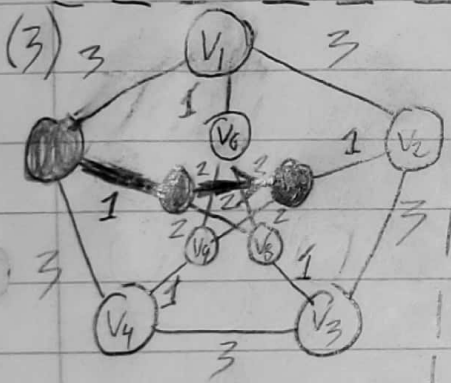
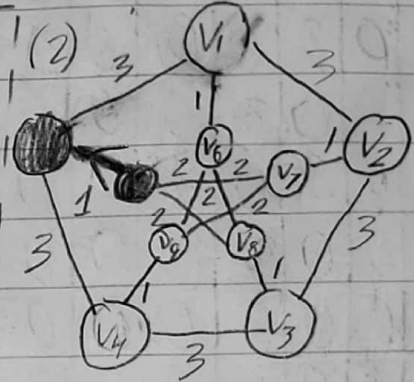
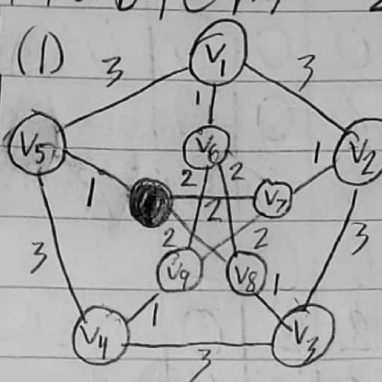
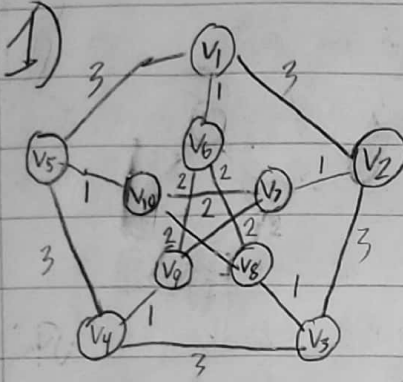
(4)



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(5)

HW2 Final Draft Problem 2



KEY: 10 → 5 → 7 → 2 → 8 → 3
→ 9 → 4 → 6 → 1

(6)

2)

	V_1	V_2	V_3	V_4	V_5	V_6	V_7	V_8	V_9	V_{10}
V_1	0	3	0	0	3	1	0	0	0	0
V_2	3	0	3	0	0	0	1	0	0	0
V_3	0	3	0	3	0	0	0	1	0	0
V_4	0	0	3	0	3	0	0	0	1	0
V_5	3	0	0	3	0	0	0	0	0	1
V_6	1	0	0	0	0	0	0	2	2	0
V_7	0	1	0	0	0	0	0	0	2	2
V_8	0	0	1	0	0	2	0	0	0	2
V_9	0	0	0	1	0	2	2	0	0	0
V_{10}	0	0	0	0	1	0	2	2	0	0

(adjacency
matrix)