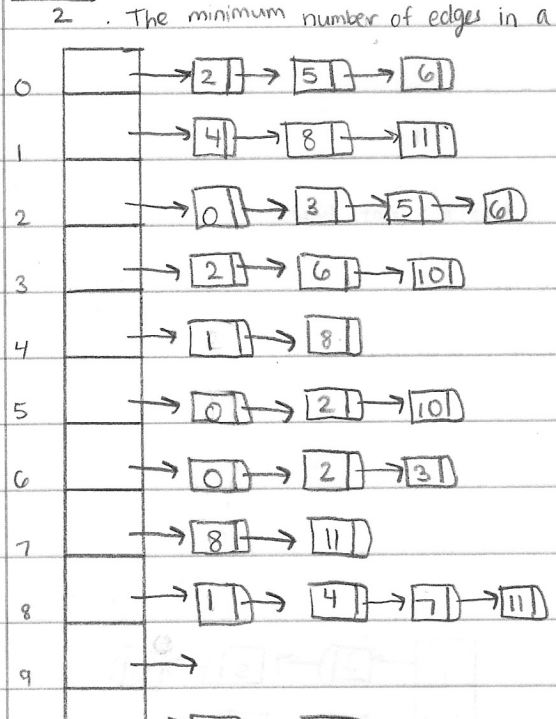
Review Exercise 3

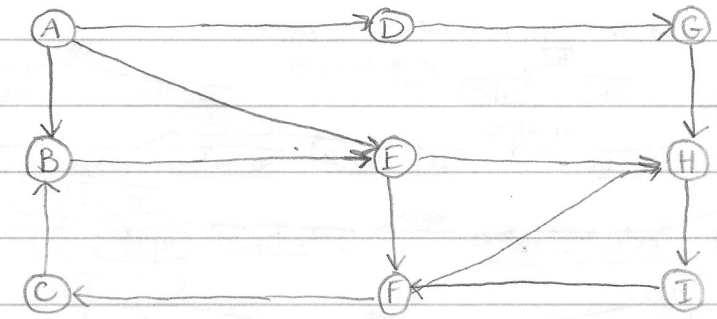
1. The number of edges in a graph with V vertices and no parallel edges is moved at $\frac{V(V-1)}{2}$. The minimum number of edges in a graph with V vertices is V-1.

2.



Review Exercise 3

3. A-B A-D A-E B-E C-B D-G E-H E-F F-H F-C G-H H-I I-F

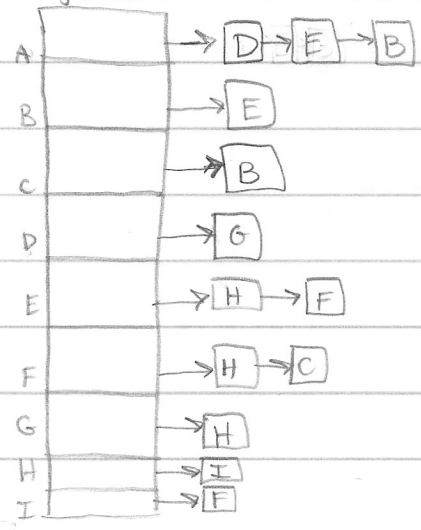


Matrix

	A	B	C	D	E	F	G	H	I
A	0	1	0	1	1	0	0	0	0
B	0	0	0	0	1	0	0	0	0
C	0	1	0	0	0	0	0	0	0
D	0	0	0	0	0	0	1	0	0
F	0	0	0	0	0	1	0	1	0
F	0	0	1	0	0	0	0	1	0
G	0	0	0	0	0	0	0	1	0
H	0	0	0	0	0	0	0	0	1
I	0	0	0	0	0	1	0	0	0

List

adj[ ]



4. BFS Starting at E

E, F, H, C, I, B

5. DFS Starting at E

E, F, C, B, H, I

6. 1-2

1-5

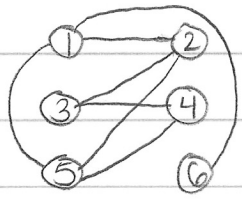
1-6

2-3

2-5

3-4

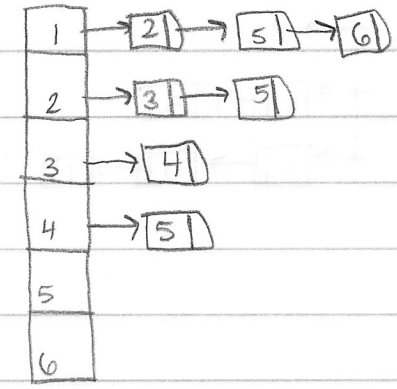
4-5



No it's not true

7.

	1	2	3	4	5	6
1	0	1	0	0	1	1
2	0	0	1	0	1	0
3	0	0	0	1	0	0
4	0	0	0	0	1	0
5	0	0	0	0	0	0
6	0	0	0	0	0	0



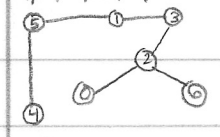
8. BFS

1, 2, 5, 6, 3, 4

DFS

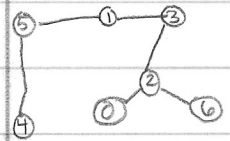
1, 2, 3, 4, 5, 6

9.



Kruskal

2-3	0.17
0-2	0.26
1-3	0.29
1-5	0.32
4-5	0.35
2-6	0.40
6	1.79



Prims

2-3	0.17
0-2	0.26
1-3	0.29
1-5	0.32
4-5	0.35
2-6	0.40
6	1.79