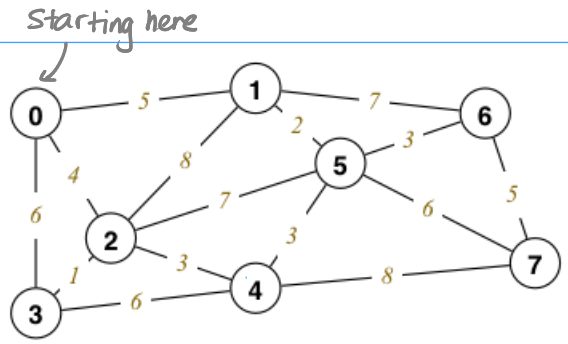
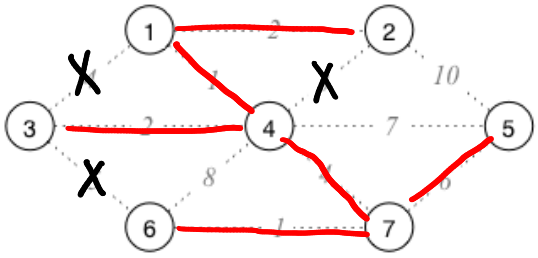
Dijkstra's Algorithm



Vertex	0	1	2	3	4	5	6	7
Seen?	✓	✓	✓	✓	✓	✓	✓	✓
Distance	0	5	4	5	7	7	10	13
Predecessor	-1	0	0	2	2	1	5	5

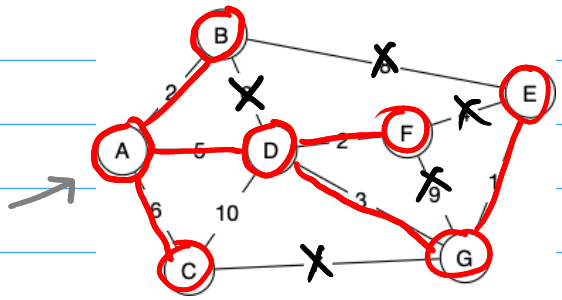
Kruskal's Algorithm



Pick smallest edge by weight that doesn't create a cycle.

Iteration	Candidates	Choice
1	1-4, 6-7	1-4
2	6-7	6-7
3	1-2, 3-4	1-2
4	3-4	3-4
5	4-7	4-7
6	7-5	7-5

Prim's Algorithm



Pick the smallest edge with one vertex in the MST, and the other not.

Iteration	Candidates	Choice
1	AB(2), AC(6), AD(5)	AB(2)
2	AC(6), AD(5), BD(6), BE(8)	AD(5)
3	AC(6), DF(2), DG(3), BE(8), CD(10)	DF(2)
4	AC(6), DG(3), BE(8), CD(10), EF(4), FG(9)	DG(3)
5	AC(6), BE(8), CD(10), EF(4), EG(1), CG(7)	EG(1)
6	AC(6), CD(10), CG(7)	AC(6)