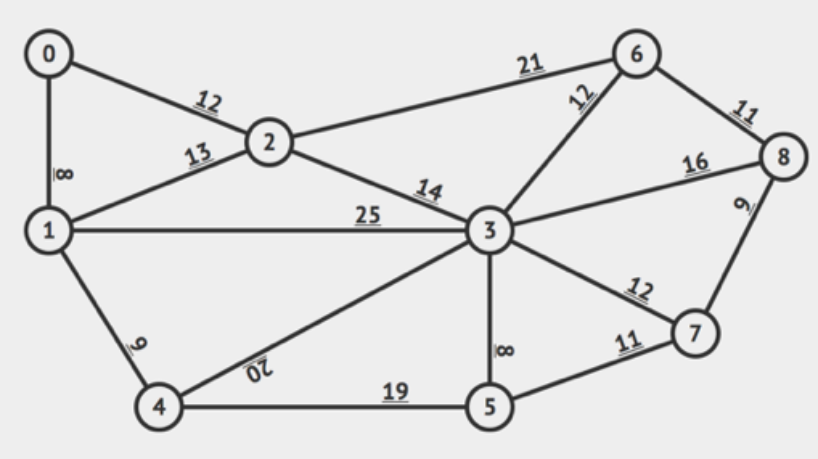
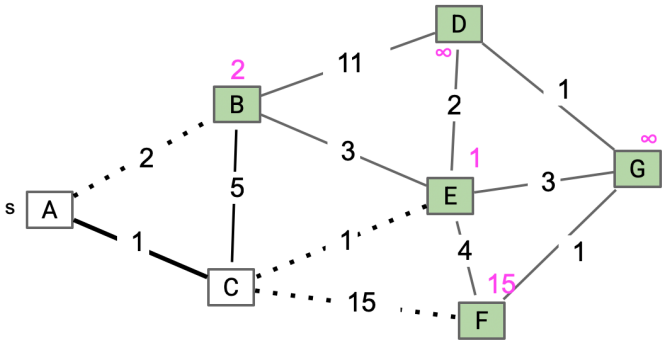
CS62: Spring 2025 | Lecture #24 (MSTs) worksheet | Jingyi Li

1. Starting at node 0, run Prim's algorithm to find the MST.



2. We just relaxed C's edges. Show distTo, edgeTo, and fringe after the next relaxation.

Node	distTo	edgeTo
A		-
B	2	A
C		**A**
D	∞	-
E	1	C
F	15	C
G	∞	-



Fringe: [(E: 1), (B: 2), (F: 15), (D: ∞), (G: ∞)]

3. Run Kruskal's to find the MST on this graph. What do you notice about this answer vs Q1's answer?

Edge	Weight
0-1	8
3-5	8
1-4	9
7-8	9
5-7	11
6-8	11
0-2	12
3-6	12
3-7	12
1-2	13
2-3	14
3-8	16
4-5	19
4-3	20
2-6	21
1-3	25