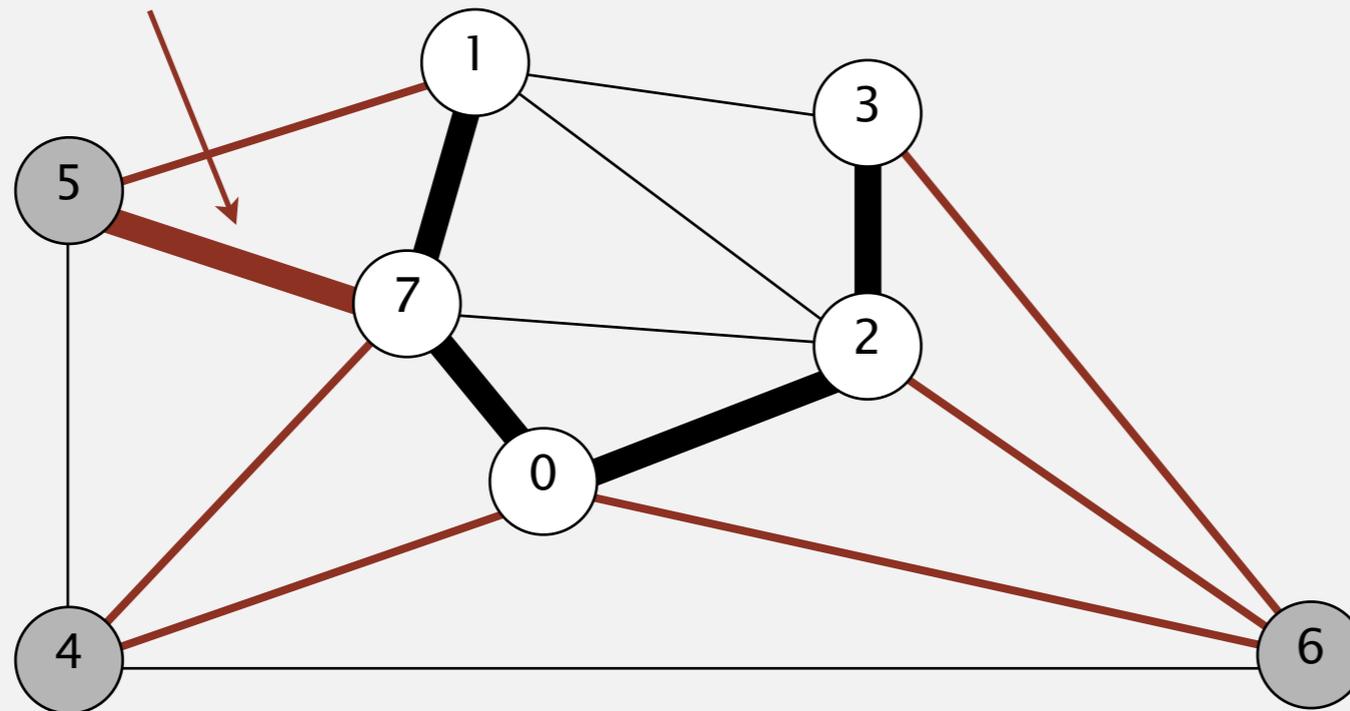


# Prim's algorithm demo

- Start with vertex 0 and greedily grow tree  $T$ .
- Add to  $T$  the min weight edge with exactly one endpoint in  $T$ .
- Repeat until  $V - 1$  edges.

min weight edge with exactly one endpoint in  $T$



edges with exactly one endpoint in  $T$  (sorted by weight)

↓

in MST →	5-7	0.28
	1-5	0.32
	4-7	0.37
	0-4	0.38
	6-2	0.40
	3-6	0.52
	6-0	0.58

**MST edges**

0-7 1-7 0-2 2-3