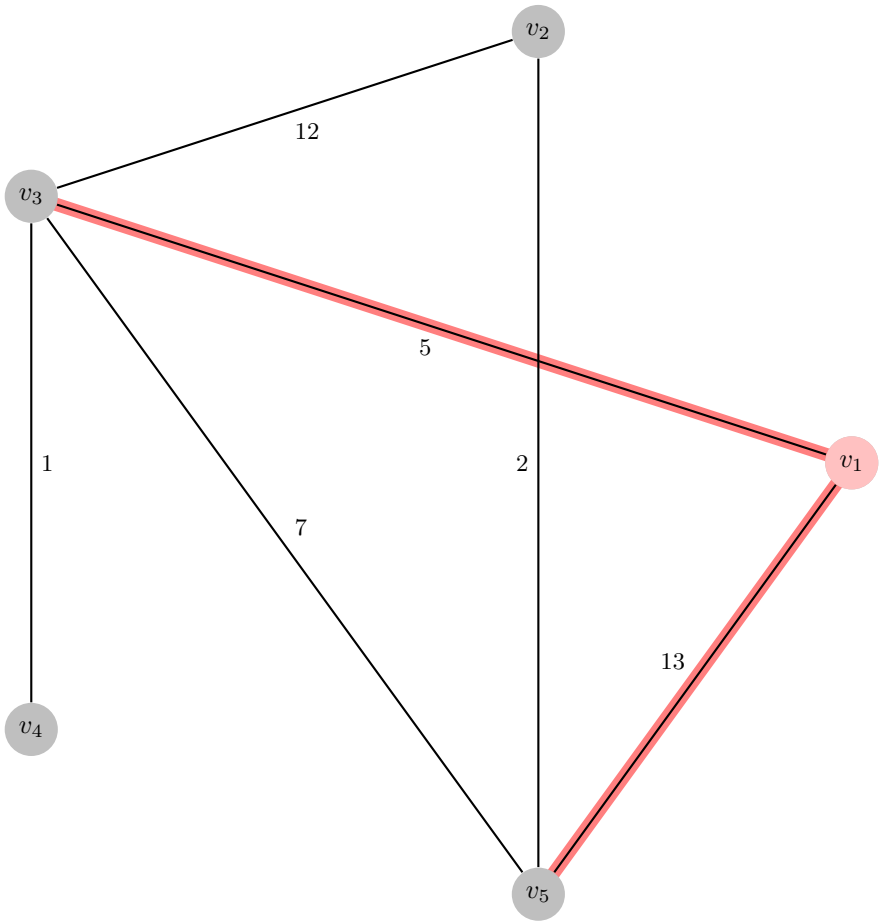
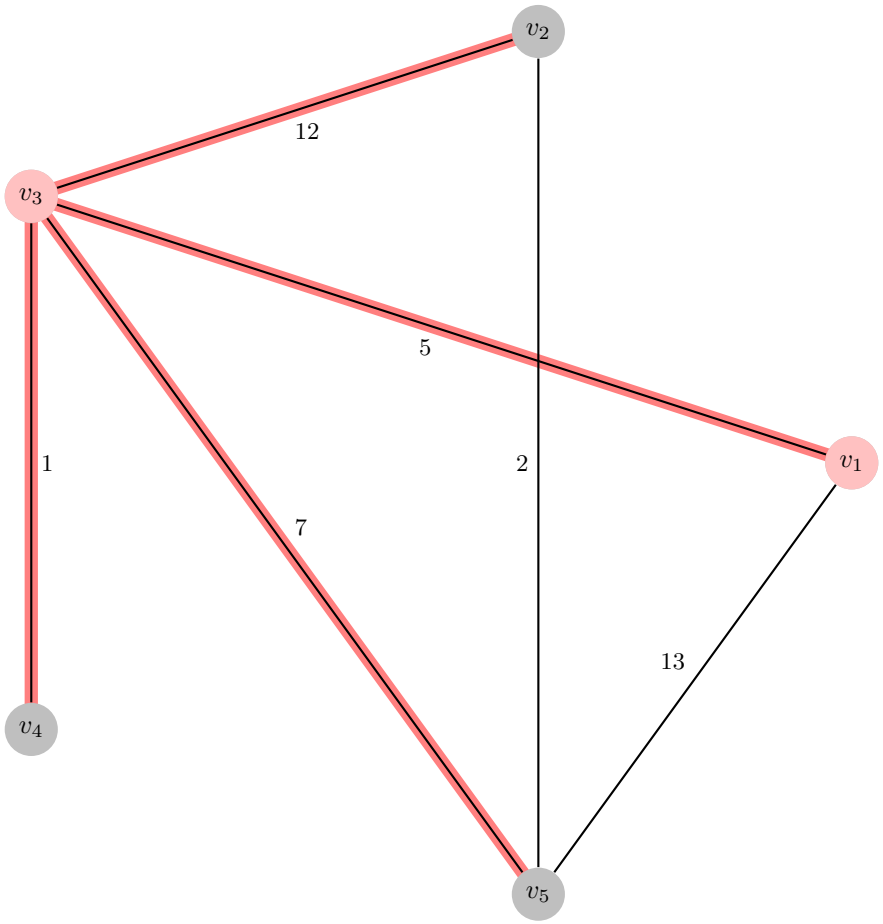
vertex	shortest path	length
v_2	*null*	∞
v_3	$v_1 \to v_3$	5
v_4	*null*	∞
v_5	$v_1 \to v_5$	13



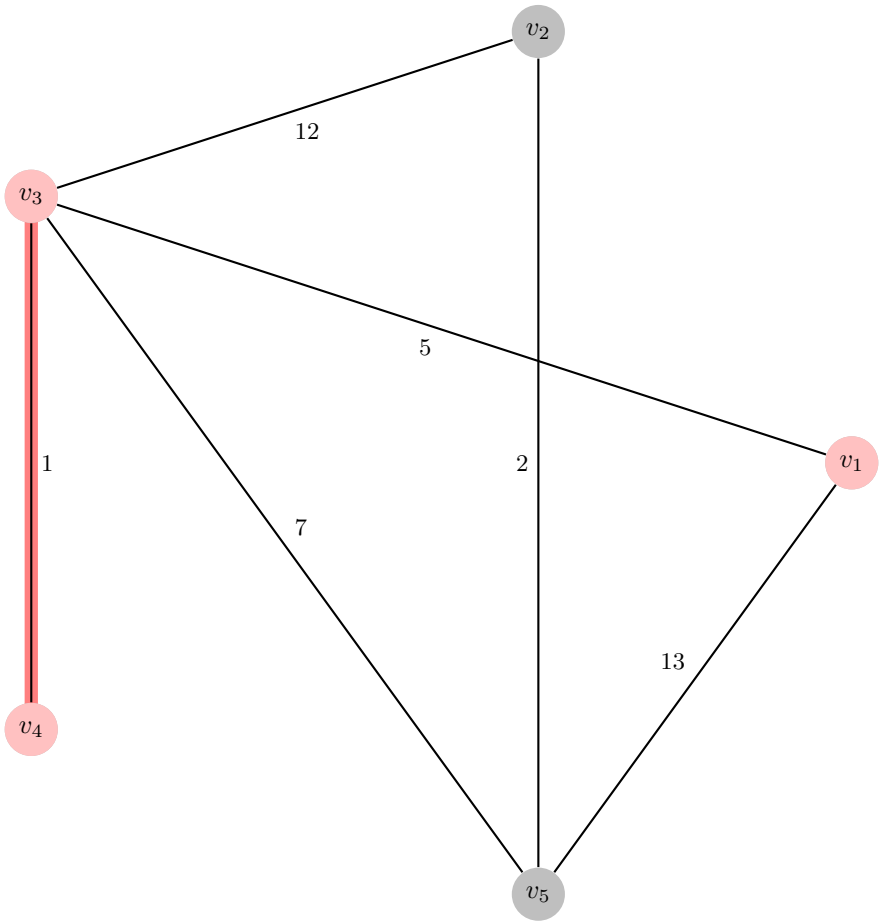
Vertices explored from v_1. Next vertex is v_3. Edge relaxations shown in **bold**.

vertex	shortest path	length
v_2	$v_1 \to v_3 \to v_2$	$17 = \min\{\infty, 5{+}12\}$
v_3	$v_1 \to v_3$	5
v_4	$v_1 \to v_3 \to v_4$	$6 = \min\{\infty, 5{+}1\}$
v_5	$v_1 \to v_3 \to v_5$	$12 = \mathbf{\min\{13,\ 5{+}7\}}$



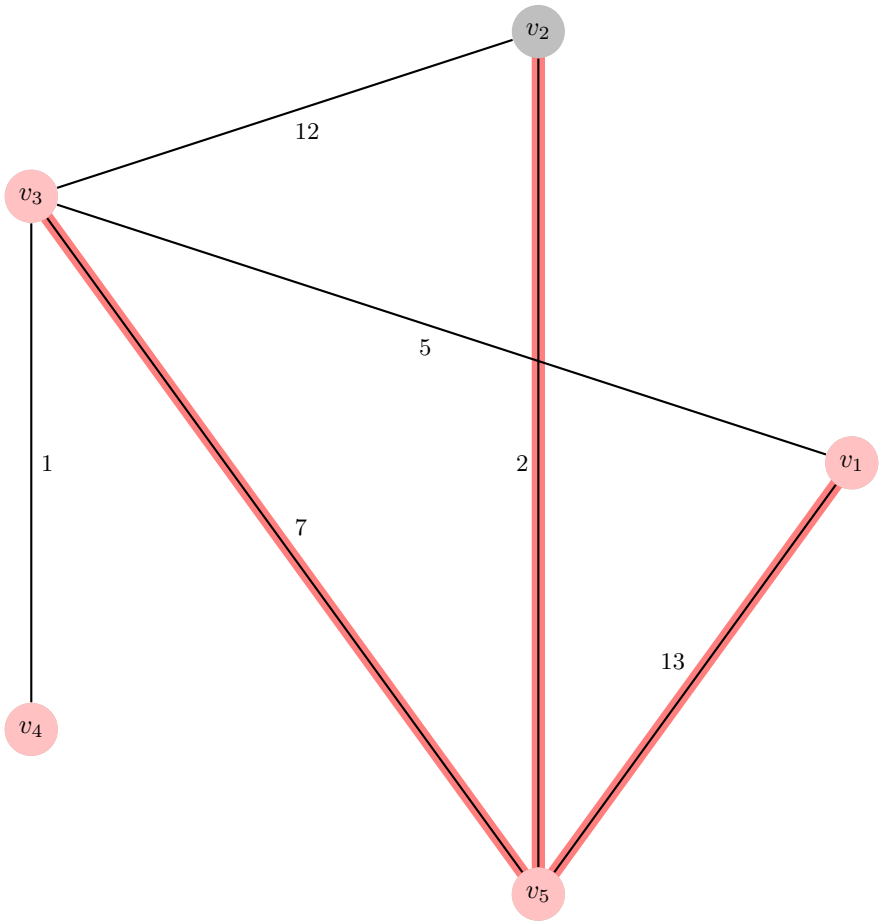
Vertices explored from v_3. Next vertex is v_4. Edge relaxations shown in **bold**.

vertex	shortest path	length
v_2	$v_1 \to v_3 \to v_2$	17
v_3	$v_1 \to v_3$	$5 = \min\{5, 6{+}1\}$
v_4	$v_1 \to v_3 \to v_4$	6
v_5	$v_1 \to v_3 \to v_5$	12



Vertices explored from v_4. Next vertex is v_5. Edge relaxations shown in **bold**.

vertex	shortest path	length
v_2	$v_1 \to v_3 \to v_5 \to v_2$	$14 = \mathbf{min\{17,\ 12{+}2\}}$
v_3	$v_1 \to v_3$	$5 = \min\{5,\ 12{+}7\}$
v_4	$v_1 \to v_3 \to v_4$	6
v_5	$v_1 \to v_3 \to v_5$	12



Vertices explored from v_5. Next vertex is v_2. Edge relaxations shown in **bold**.