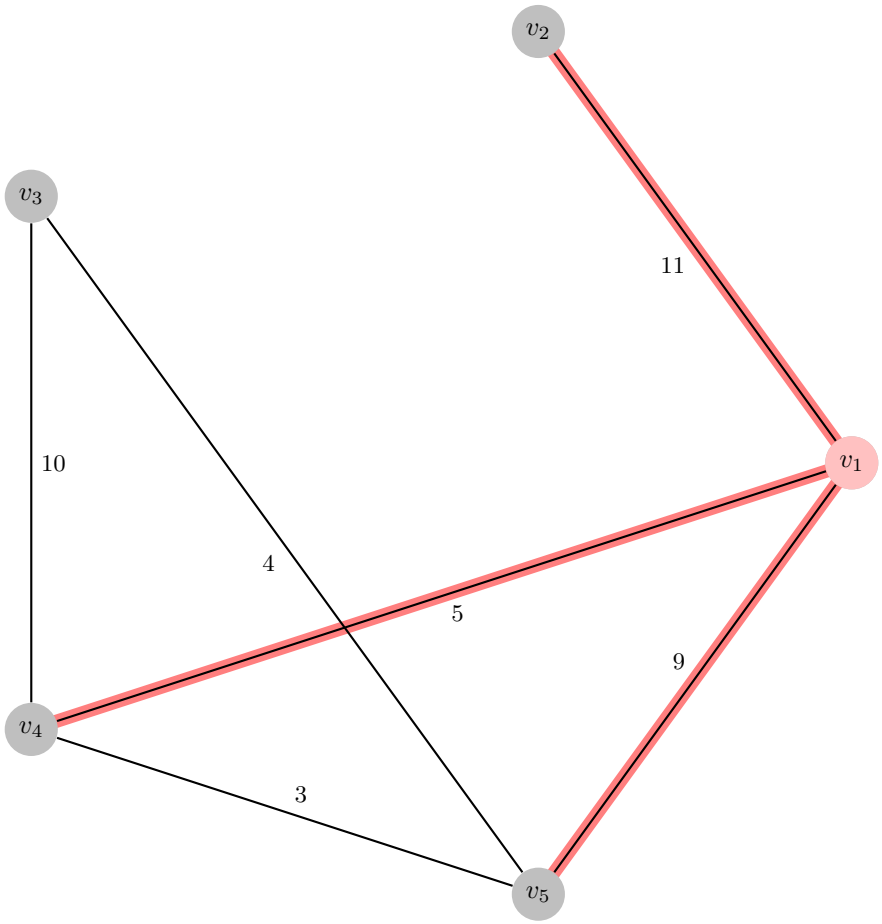
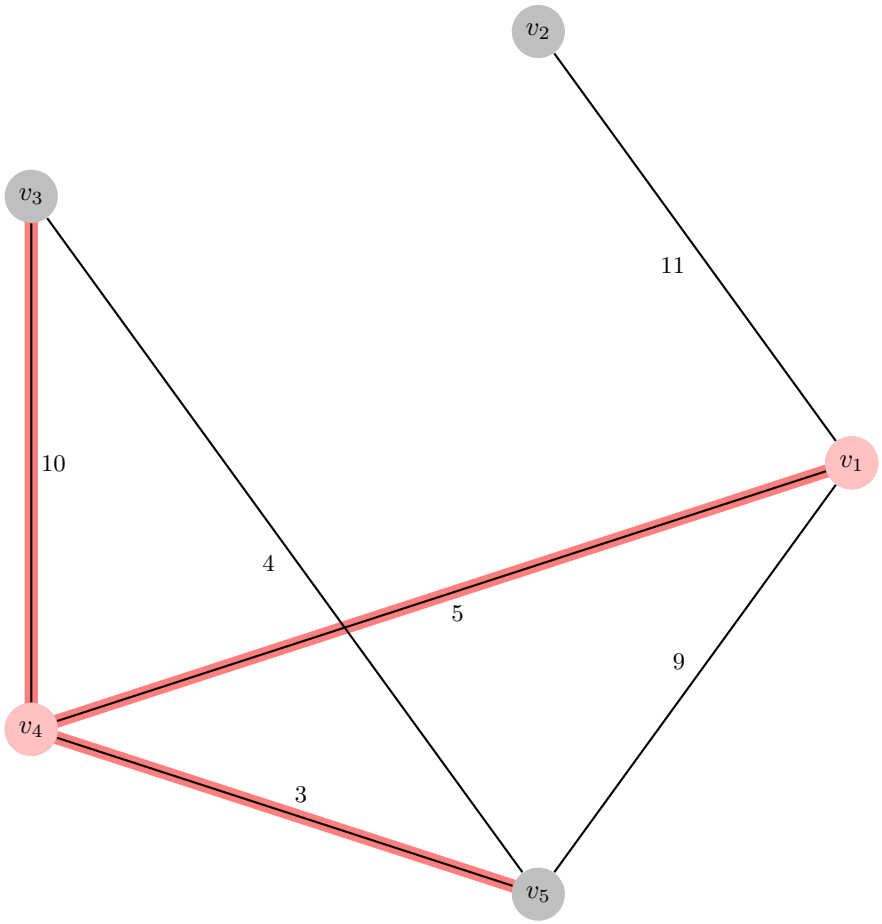
vertex	shortest path	length
v_2	$v_1 \to v_2$	11
v_3	$null$	∞
v_4	$v_1 \to v_4$	5
v_5	$v_1 \to v_5$	9



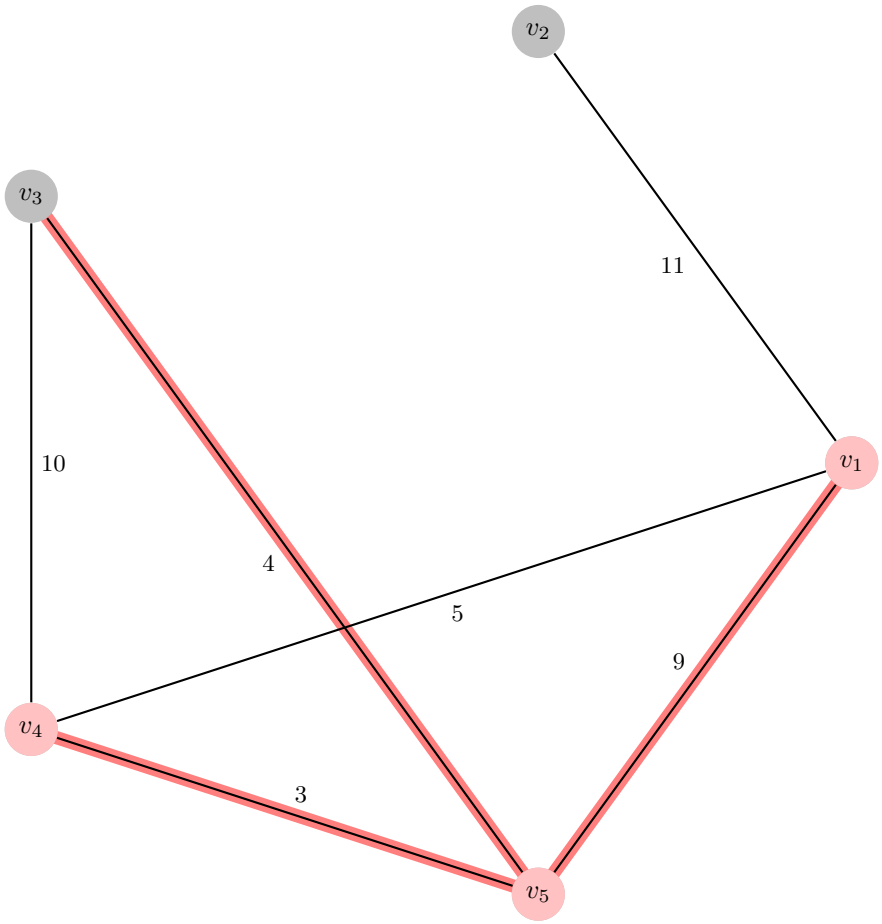
Vertices explored from v_1. Next vertex is v_4. Edge relaxations shown in **bold**.

vertex	shortest path	length
v_2	$v_1 \to v_2$	11
v_3	$v_1 \to v_4 \to v_3$	$15 = \min\{\infty, 5{+}10\}$
v_4	$v_1 \to v_4$	5
v_5	$v_1 \to v_4 \to v_5$	$8 = \mathbf{\min\{9, 5{+}3\}}$



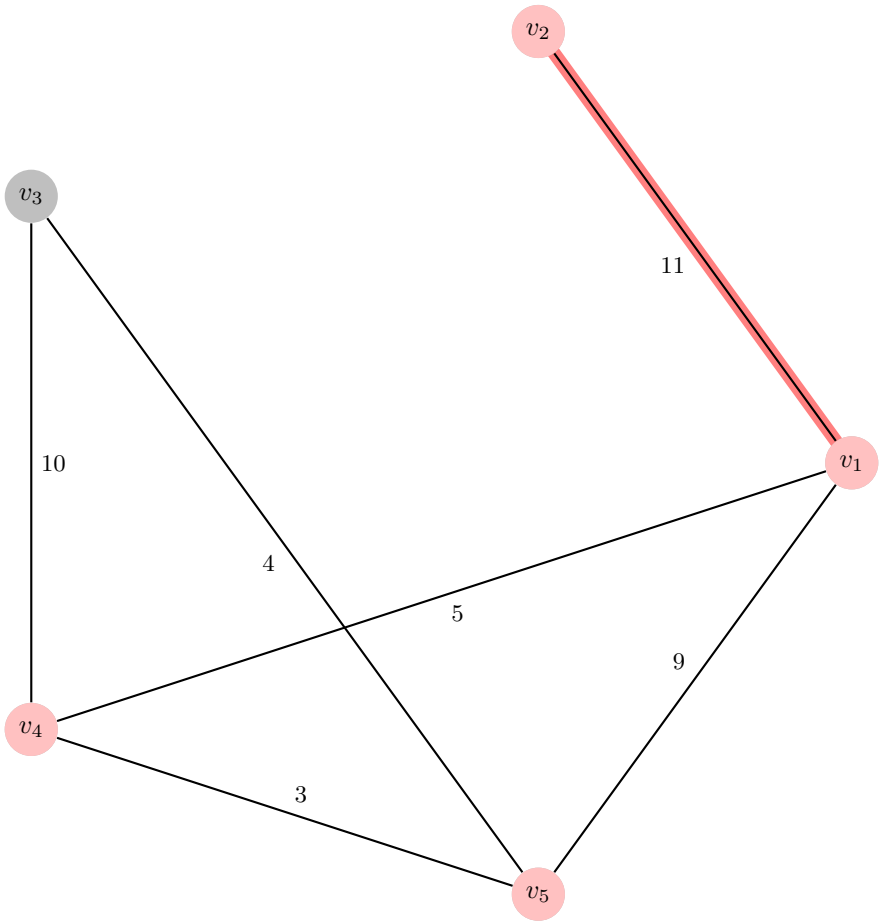
Vertices explored from v_4. Next vertex is v_5. Edge relaxations shown in **bold**.

vertex	shortest path	length
v_2	$v_1 \to v_2$	11
v_3	$v_1 \to v_4 \to v_5 \to v_3$	12 = **min{15, 8+4}**
v_4	$v_1 \to v_4$	5 = min{5, 8+3}
v_5	$v_1 \to v_4 \to v_5$	8



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

vertex	shortest path	length
v_2	$v_1 \to v_2$	11
v_3	$v_1 \to v_4 \to v_5 \to v_3$	12
v_4	$v_1 \to v_4$	5
v_5	$v_1 \to v_4 \to v_5$	8



Vertices explored from v_2. Next vertex is v_3. Edge relaxations shown in **bold**.