Use Kruskal’s algorithm to find a minimum weight spanning tree.

Note: \( V = 7 \), so any spanning tree will have \( E = V - 1 = 6 \) edges.

So we’re done after 6 iterations.

Step 1. List the edges from smallest to largest weight.
Choose minimum weight edges that do not create a cycle.
We can always start with the first 2 edges.

So \( e_1 = 34 \)
\( e_2 = 26 \)

\( e_3 = 12 \)
\( e_4 = 46 \)

- Can't add 32 if makes a cycle
- Can't add 61
- Can't add 36

\( e_5 = 50 \)
\( e_6 = 60 \)

Minimum weight spanning tree

weight \((T)\) = 142 + 2 + 3 + 46 + 70