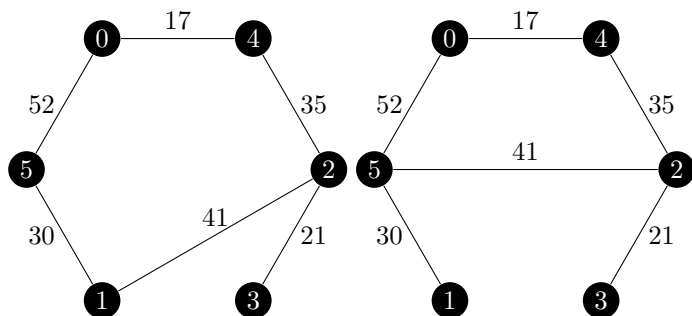


Undirected Graph (From Held and Karp paper)

Iteration 1:

Starting configuration: $(\emptyset, \emptyset, [0 \ 0 \ 0 \ 0 \ 0 \ 0], 196)$

Minimum 1-Trees:



Vertex 3 out-of-kilter LOW

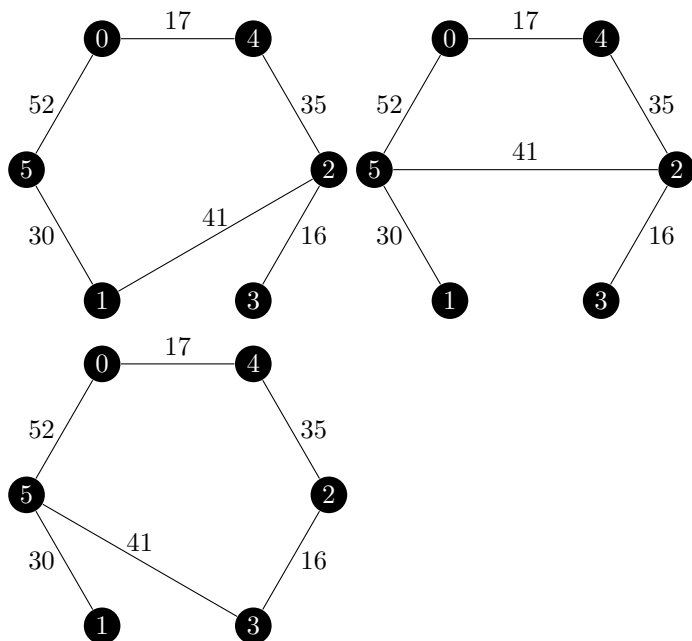
$$d = [0 \ 0 \ 0 \ -1 \ 0 \ 0]$$

$$\epsilon(\pi, d) = 5$$

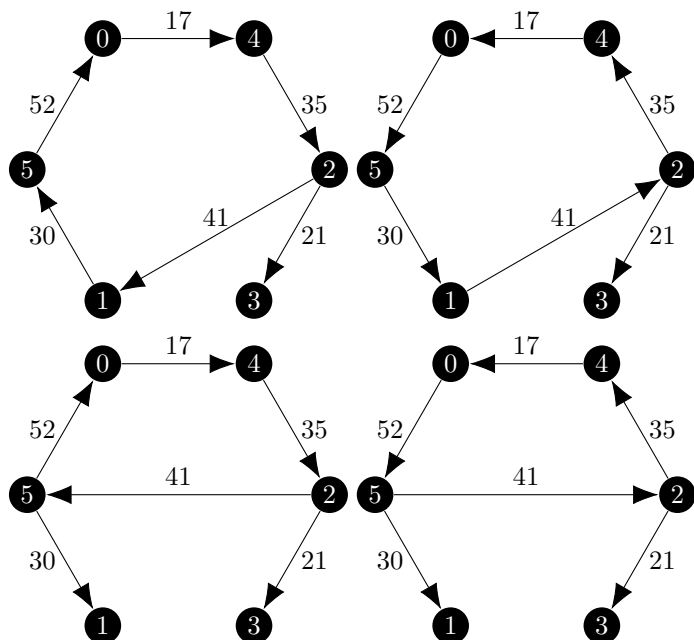
New configuration: $(\emptyset, \emptyset, [0 \ 0 \ 0 \ -5 \ 0 \ 0], 201)$

Iteration 2:

Minimum 1-Trees:

**Directed Graph (From my program)**Starting configuration: $(\emptyset, \emptyset, [0 \ 0 \ 0 \ 0 \ 0 \ 0], 196)$

Minimum 1-Arborescences:



Vertex 3 out-of-kilter LOW

$$d = [0 \ 0 \ 0 \ -1 \ 0 \ 0]$$

$$\epsilon(\pi, d) = 5$$

New configuration: $(\emptyset, \emptyset, [0 \ 0 \ 0 \ -5 \ 0 \ 0], 212)$

Minimum 1-Arborescences

