

HANDLE_SPLIT_VERTEX(v_i)

1. Search in \mathcal{T} to find the edge e_j directly left of v_i .
2. Insert the diagonal connecting v_i to $helper(e_j)$ in \mathcal{D} .
3. $helper(e_j) \leftarrow v_i$
4. Insert e_i in \mathcal{T} and set $helper(e_i)$ to v_i .