form G'
run BELLMAN-FORD on G' to compute $\delta(s, v)$ for all $v \in G'.V$
if BELLMAN-FORD returns FALSE
    G has a negative-weight cycle
else compute $\widehat{w}(u, v) = w(u, v) + \delta(s, u) - \delta(s, v)$ for all $(u, v) \in E$
    let $D = (d_{uv})$ be a new $n \times n$ matrix
    for each vertex $u \in G.V$
        run Dijkstra's algorithm from u using weight function $\widehat{w}$
            to compute $\widehat{\delta}(u, v)$ for all $v \in V$
        for each vertex $v \in G.V$
            // Compute entry d_{uv} in matrix D.
            $d_{uv} = \underbrace{\widehat{\delta}(u, v) + \delta(s, v) - \delta(s, u)}_{\text{because if } p \text{ is a path } u \leadsto v \text{, then } \widehat{w}(p) = w(p) + h(u) - h(v)}$
    return D