1. Until H is empty, do the following:
   - 1.1 Extract the minimum key from H and call it u.
   - 1.2 Add u to S. It is now marked as *processed*.
   - 1.3 For all neighbours k of u, do the following:
     - 1.3.1 If $d[u] + weight(u, k) < d[k]$, update $d[k]$ to the calculated distance. Set $p[k] = u$.
     - 1.3.2 Otherwise, do nothing.
2. To return a shortest path (s, t) to the user, start at $p[t] = r$, take the predecessor r and compute $p[r]$. Repeat until you reach s.