Solution to exercise in recurrent events

The weights are

$$w_j(t) = I(U_j \geq T_j \wedge t)\widehat{G}(t)/\widehat{G}(\widetilde{T}_j \wedge t)$$

where

- U_j = time of censoring
- T_j = time of death
- $\widetilde{T}_j = T_j \wedge U_j$ = obs. time last seen

1. If j is still alive and uncensored at t then
   $U_j \geq T_j \wedge t$ and $\widetilde{T}_j \wedge t = t$ and hence $w_j(t) = 1$.
2. If j was censored before time t then
   $U_j < T_j \wedge t$ and hence $w_j(t) = 0$.
3. If j died before time t then
   $T_j \wedge t = T_j$, $U_j > T_j$, and $\widetilde{T}_j = T_j$ and hence $w_j(t) = \frac{\widehat{G}(t)}{\widehat{G}(T_j)}$, the conditional probability of being uncensored at time t given uncensored at time $T_j < t$.