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task  $R$ .SERVEPEERS()
  while True do
    Wait for a connection from  $P_i^?$ 
    for  $S^t \in S$  do
      if  $|T^t| < N$  then  $[S^t] \Rightarrow P_i^?$ 

task  $\mathcal{R}$ .UPDATEFULLNESS()
  while True do
     $[[\mathcal{T}_j]] \leftarrow \mathcal{S}_j$ 

task  $\mathcal{S}_j$ .SERVEPEERS()
  while True do
    Wait for connection from  $\mathcal{P}_i$ 
    if  $\mathcal{P}_i$  is joining then
      for  $\mathcal{P}_k \in \mathcal{T}_j$  do  $[\mathcal{P}_k] \Rightarrow \mathcal{P}_i$ 
       $\mathcal{T}_j = \mathcal{T}_j \cup \mathcal{P}_i$ 
    else
       $\mathcal{T}_j = \mathcal{T}_j \setminus \mathcal{P}_i$ 
       $[[\mathcal{T}_j]] \Rightarrow \mathcal{R}$ 

task  $\mathcal{P}_k.(\mathcal{P}_i)$   $\triangleright$  Reply a [hello] message.
  [hello]  $\rightarrow \mathcal{P}_i$ 

task  $\mathcal{P}_i$ .JOIN( $\mathcal{R}$ )  $\triangleright$  Incoming peer  $\mathcal{P}_i$  joins a team.
   $[[\mathcal{S}_j]] \leftarrow \mathcal{R}$ .GETSPLITTER( $\mathcal{P}_i$ )  $\triangleright$  Receive a splitter.
  for  $\mathcal{P}_k \in [[\mathcal{T}_j]] \leftarrow \mathcal{S}_j$ .GETPEERS( $\mathcal{P}_i$ ) do  $\triangleright$  Receive a list of peers.
    [hello]  $\rightarrow \mathcal{P}_k$ 
    [hello]  $\leftarrow \mathcal{P}_k$  with timeout

```