

begin

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 $T \leftarrow \text{FindThreshold}()$ 
 $i \leftarrow 1$ 
 $C_i \leftarrow \text{Initialize}()$ 
 $R \leftarrow \emptyset$ 
 $Q \leftarrow$  Elements from  $U \setminus \bigcup_{j=1}^i C_j$  with
at least  $T$  neighbors in  $C_i$ 
while  $|Q| > 0$  do
    if  $|Q| > 2(L - (l + T) + 1)$  then
         $R \leftarrow R \cup Q$ 
         $i \leftarrow i + 1$ 
         $C_i \leftarrow \text{Initialize}()$ 
    else
         $C_i \leftarrow C_i \cup Q$ 
         $Q \leftarrow$  Elements from  $U \setminus \bigcup_{j=1}^i C_j$ 
        with at least  $T$  neighbors in  $C_i$ 
 $N_C \leftarrow \text{Number of Clusters}()$ 
for every pair of cluster  $C_i$  and  $C_j$ ,
 $1 \leq i, j \leq N_C$  do
     $W_{ij} \leftarrow$  Number of paired-end
    reads connecting the two clusters
for  $1 \leq i \leq N_C$  do
     $Top_i \leftarrow \{j_1, j_2\}$  so that  $W_{ij_1}$  and
     $W_{ij_2}$  hold the two largest values
    among all  $W_{ij}$ 's.
for  $1 \leq i \leq N_C$  do
    for every  $j \in Top_i$  do
        if  $i \in Top_j$  then
            Merge( $C_i, C_j$ )
```

end