DecompositionStep $(C[1..n])$

```
1  i ← 1 ;
2  j ← 1 ;
3  half ← n/2 ;
4  while j <= n − 3 do
5  │   C'[i] ← C[j].h1 + C[j + 1].h2 + C[j + 2].h3 + C[j + 3].h4 ;
6  │   C'[i + half] ← C[j].g1 + C[j + 1].g2 + C[j + 2].g3 + C[j + 3].g4 ;
   │   j ← j + 2 ;
7  │   i ← i + 1 ;
8  end
9  C'[i] ← C[n − 1].h1 + C[n].h2 + C[1].h3 + C[2].h4 ;
10 C'[i + half] ← C[n − 1].g1 + C[n].g2 + C[1].g3 + C[2].g4 ;
11 C ← C' ;
```