

10.6

第一阶段时间: $T(1) = \Theta(n/p)$

$T(MAX.TOURNAMENT) = \Theta(p)$

$T(HC.BROADCAST) = \Theta(p)$

第二阶段时间: $T(2) = \Theta(n(n/p + p + n + p + n^2/p)) = \Theta(n^2/p + np + n^2 + n^3/p)$

第三阶段时间: $T(3) = \Theta(n/p)$

总时间: $T = \Theta(n^2/p + np + n^2 + n^3/p + n/p)$

11.5

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1  Begin
2      for k=0 to n-1 do
3          c_k = a_k
4      endfor
5      for h = logn-1 to 0 do
6          p = 2^h
7          q = n/p
8          z = w^(q/2)
9          for k=0 to n-1 do
10             if(k mod p == k mod (2p)) then
11                 c_k_temp = c_k
12                 c_k = c_k + c_{k+p} // 将 c_{k+p} 加到 c_k 上
13                 c_{k+p} = (c_k_temp - c_{k+p})z^{k mod p}
14             endif
15         endfor
16     endfor
17     for k=0 to n-1 do
18         b_{r(k)} = c_k // r(k)表示对k按位取反
19     endfor
20 End
21
```

