

Pattern Prefix sum

Principe : $y_0 = x_0$, $y_1 = x_0 + x_1$; $y_2 = x_2 + x_1 + x_0$, etc

Applications : Radix sort • Quicksort • String comparison • Lexical analysis • Stream compaction • Polynomial evaluation • Solving recurrences • Tree operations • Histograms,

Implémentation work-efficient :

```
y[0] = x[0];  
for (i = 1; i < Max_i; i++)  
    y[i] = y[i-1] + x[i];
```

Complexité : linéaire $O(N)$