

1 Divide-and-Conquer for Integer Multiplication

2 Sorting Algorithms

Bubble Sort: Typset Algorithm. Worst/Average Case = $O(n^2)$, Best Case = $O(n)$

function bubblesort($a[1, \dots, l]$)

input : An unsorted array, a

output: The sorted array

while *not swapped* **do**

 swapped = **false**;

for $i \leftarrow 1$ **to** $l-1$ **do**

if $a[i-1] > a[i]$ **then**

 swap($a[i-1], a[i]$);

 swapped = **true**;

end

end

end