

Les 1 huiswerk

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1 Opgave 1

a. Insertion sort:

$\{6, 0, 9, 3, 0, 5, 7, 3, 1, 5\}$

$\{0, 6, 9, 3, 0, 5, 7, 3, 1, 5\}$

$\{0, 6, 9, 3, 0, 5, 7, 3, 1, 5\}$

$\{0, 3, 6, 9, 0, 5, 7, 3, 1, 5\}$

$\{0, 0, 3, 6, 9, 5, 7, 3, 1, 5\}$

$\{0, 0, 3, 5, 6, 9, 7, 3, 1, 5\}$

$\{0, 0, 3, 5, 6, 7, 9, 3, 1, 5\}$

$\{0, 0, 3, 3, 5, 6, 7, 9, 1, 5\}$

$\{0, 0, 1, 3, 3, 5, 6, 7, 9, 5\}$

$\{0, 0, 1, 3, 3, 5, 5, 6, 7, 9\}$

b. Shell sort, increments $\{5, 3, 1\}$

6 0 9 3 0 5 7 3 1 5

5 6

0 7

3 9

1 3

0 5

5 0 3 1 0 6 7 9 3 5

1 5 5 7

0 0 9

3 3 6

1 0 3 5 0 3 5 9 6 7

0 0 1 3 3 5 5 6 7 9

c. Merge sort:

$\{6, 0, 9, 3, 0, 5, 7, 3, 1, 5\}$

$\{6, 0, 9, 3, 0\} \{5, 7, 3, 1, 5\}$

$\{6, 0\} \{9, 3, 0\} \{5, 7\} \{3, 1, 5\}$

$\{6\} \{0\} \{9\} \{3, 0\} \{5\} \{7\} \{3\} \{1, 5\}$

$\{6\} \{0\} \{9\} \{3\} \{0\} \{5\} \{7\} \{3\} \{1\} \{5\}$

$\{6\} \{0\} \{9\} \{0, 3\} \{5\} \{7\} \{3\} \{1, 5\}$

$\{0, 6\} \{0, 3, 9\} \{5, 7\} \{1, 3, 5\}$

$\{0, 0, 3, 6, 9\} \{1, 3, 5, 5, 7\}$

$\{0, 0, 1, 3, 3, 5, 5, 6, 7, 9\}$