Bubble Sort

This algorithm compares first two elements and swaps if they are in wrong order

given array: {12,56,3,2,1,7}

first pass: {12,56,3,2,1,7}

{12,3,56,2,1,7}

{12,3,2,56,1,7}

{12,3,2,1,56,7}

{12,3,2,1,7,56}

second pass: {3,12,2,1,7,56}

{3,2,12,1,7,56}

{3,2,1,12,7,56}

{3,2,1,7,12,56}

third pass: {2,3,1,7,12,56}

{2,1,3,7,12,56}

{2,1,3,7,12,56}

{2,1,3,7,12,56}

fourth pass: {1,2,3,7,12,56}

{1,2,3,7,12,56}

{1,2,3,7,12,56}

{1,2,3,7,12,56}

Sorted array: {1,2,3,7,12,56}