

Bubble Sort

This exercise introduces the classical **Bubble Sort**¹ algorithm as an example for how a general algorithm can look like and how it can be used.

1. Select participants

For the exercise to work there need to be around 6 to 8 students standing in a line as well as one student standing in front of them as the **programmer** and one as the **program**. It is a good idea to look for some variety in height for choosing the students in line, as well as making sure they are not already sorted by height.

2. Provide the algorithm

Hand out the Bubble Sort algorithm sheet to the **programmer**.

3. Run the algorithm

The **programmer** now has to instruct the **program** on what to do by following the orders on the sheet.

4. Check the result

When the program ends, all students in the line should be ordered by height.

5. Discuss what was experienced

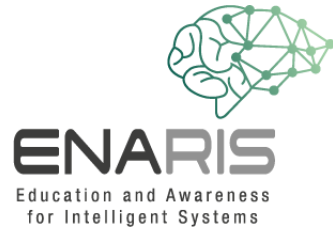
Finally it is recommended to talk about what the algorithm did (sorting people by height), how he did it, and if this would work on a different group of students as well (it would). A more advanced question would be if the algorithm could be used for a different purpose and what the programmer would have to change (like sorting names in a telephone book or sorting clothing items by cost).

6. Material

- AI Basics - Bubble Sort.pdf

7. References

1. https://www.tutorialspoint.com/data_structures_algorithms/bubble_sort_algorithm.htm



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