

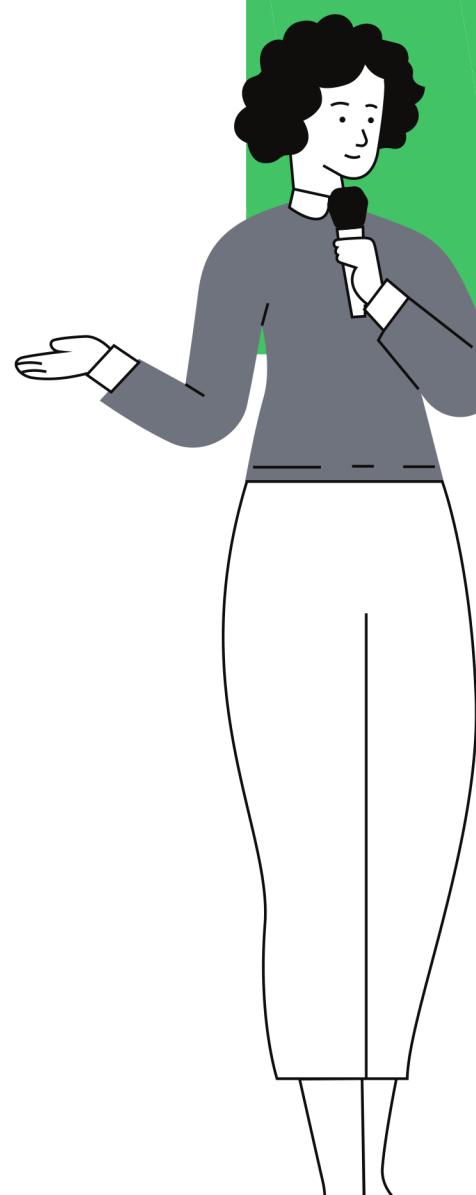
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Hi ...

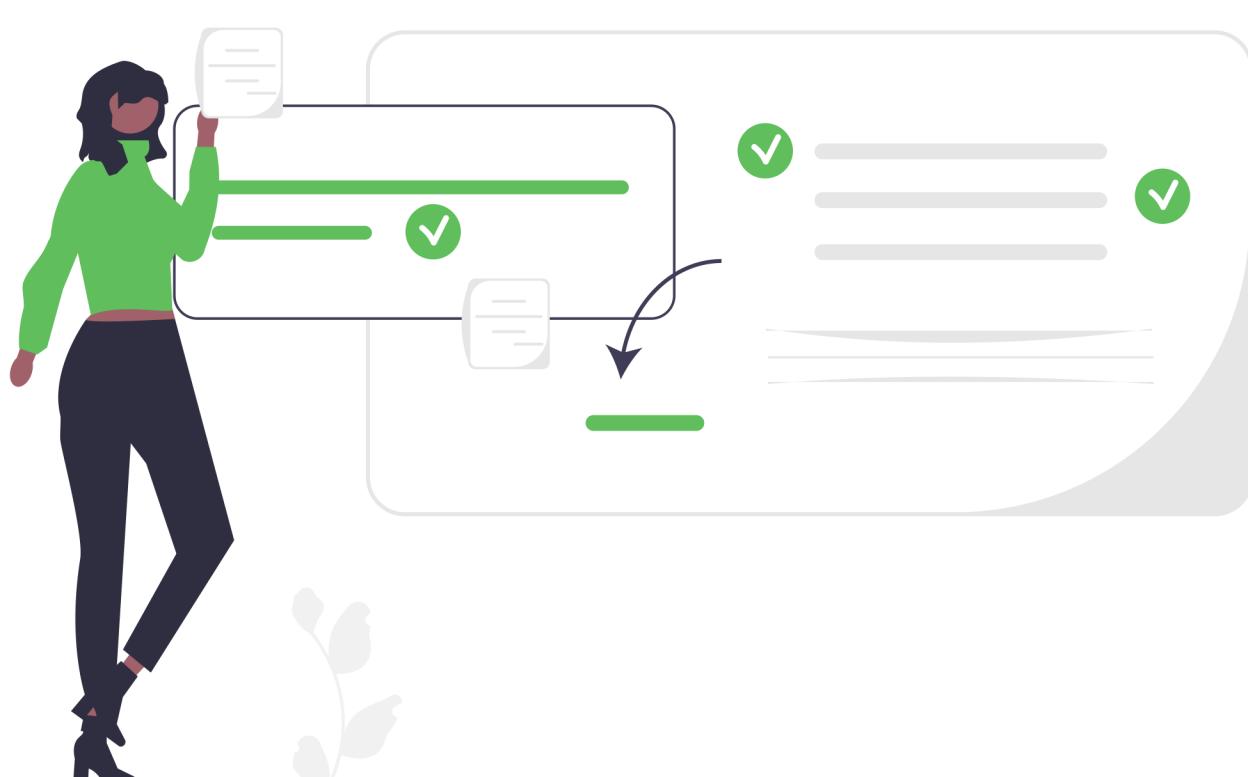

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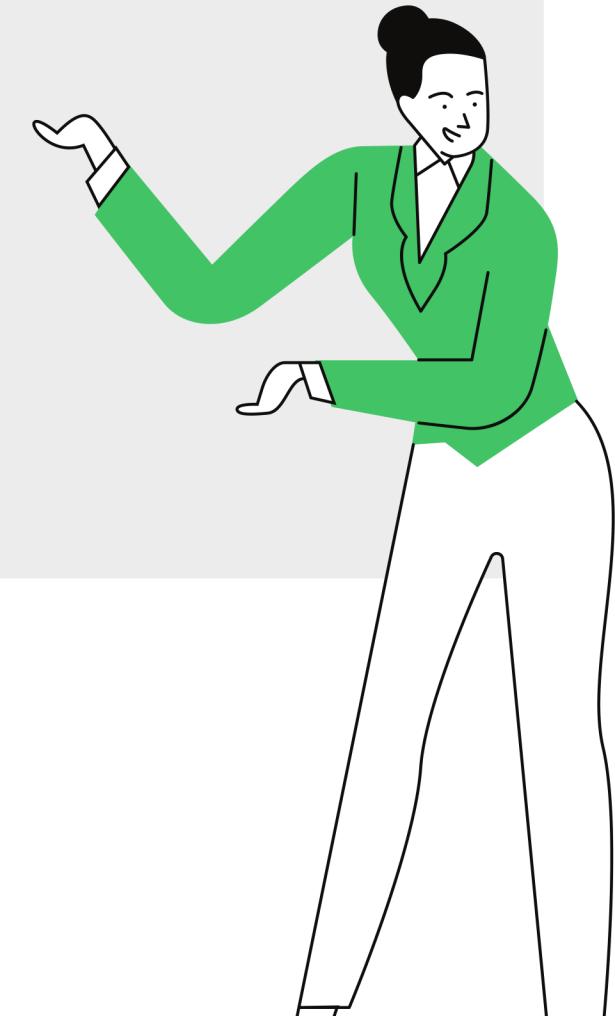
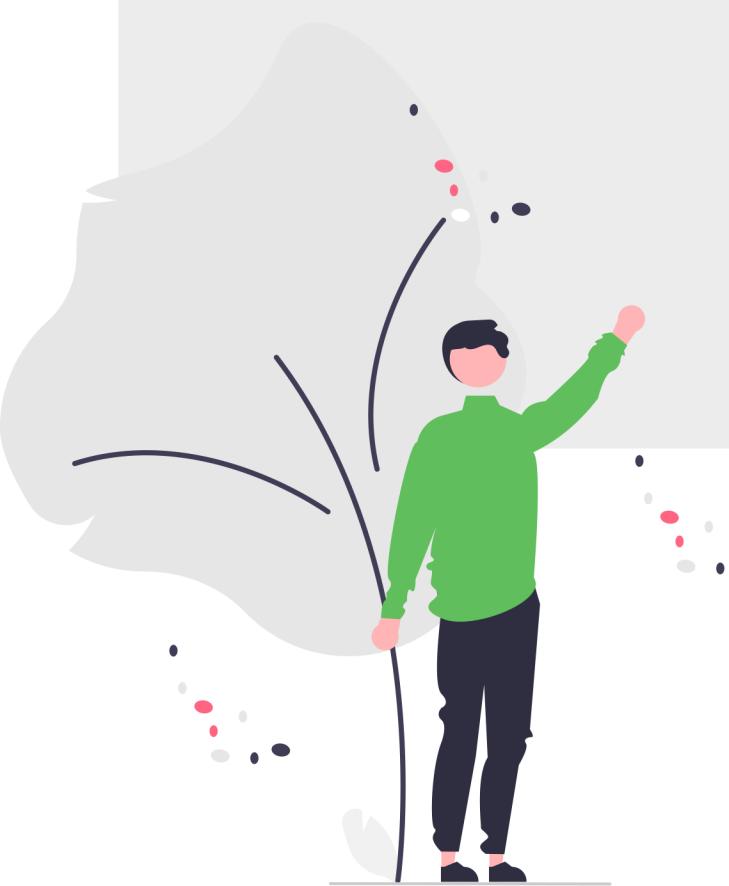
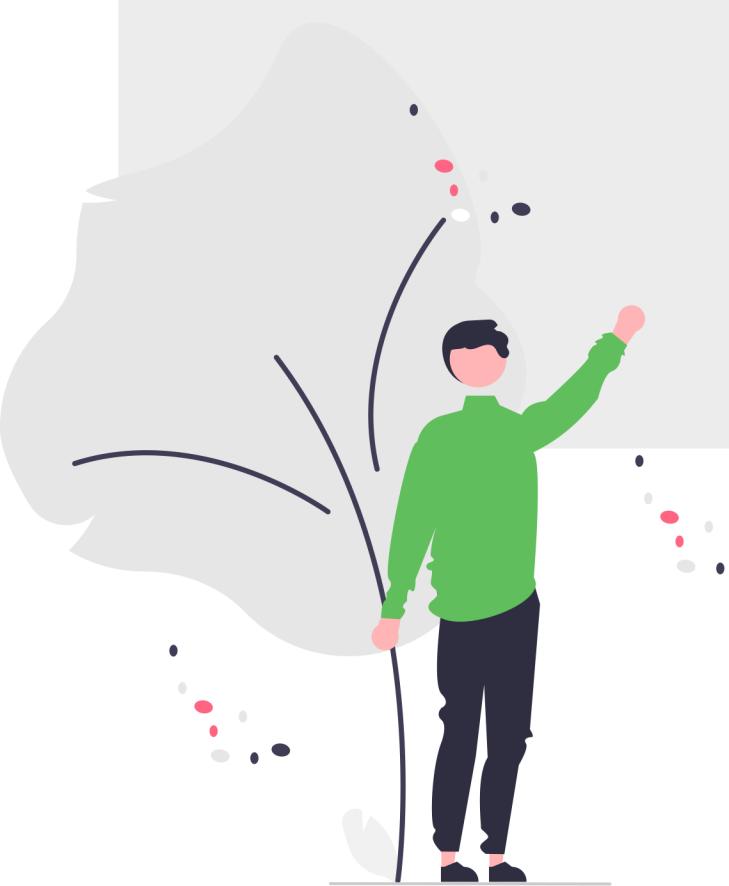
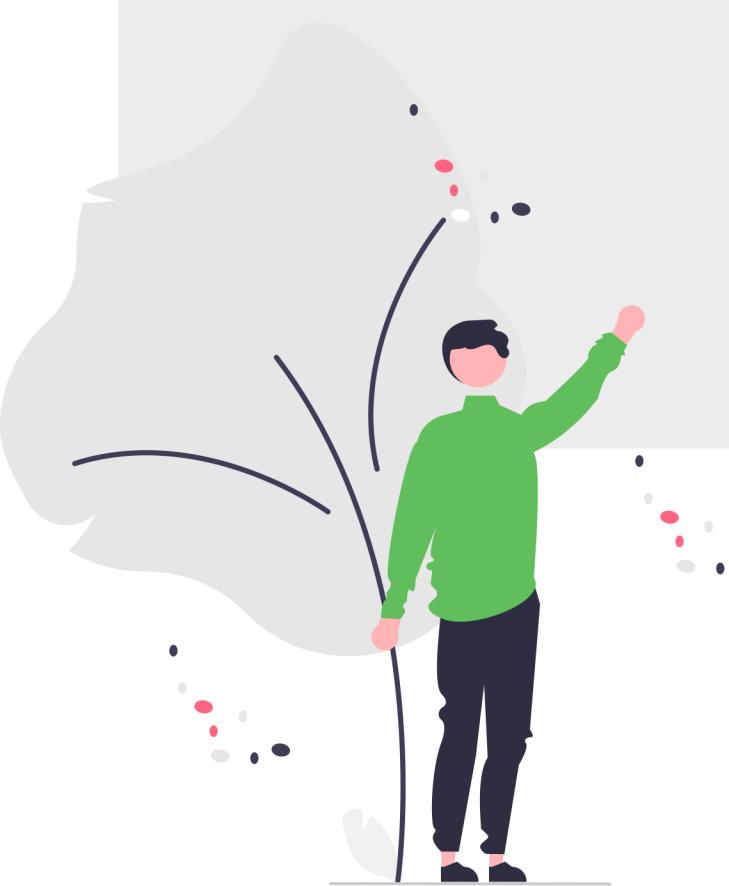
SELECTION SORT

- 1** What is Sorting
- 2** Types of Sorting Methods
- 3** Selection sort
- 4** Understanding It's Working



WHAT IS
SORTING?





Sorting is the process of arranging items or data in a particular order, usually ascending or descending order.



Types of Sorting Methods

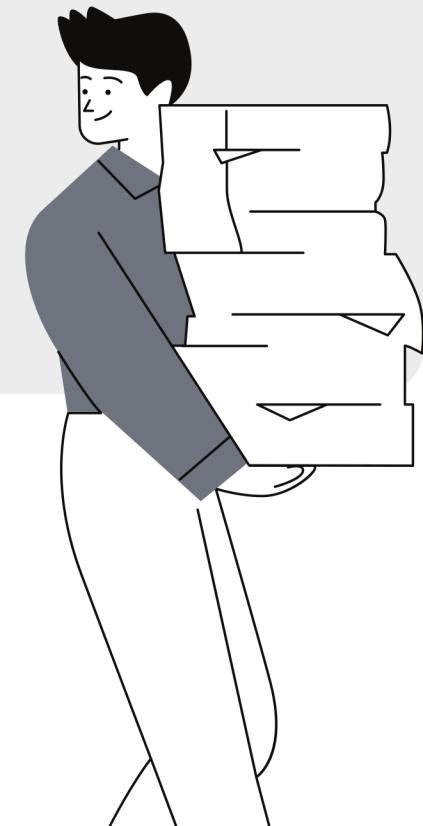
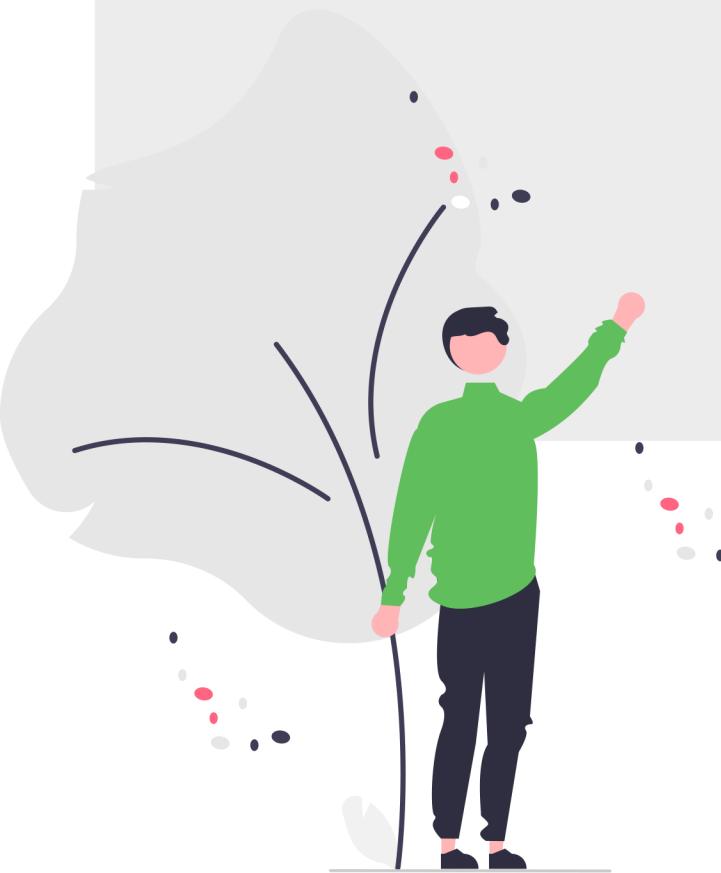
1 Bubble sort

2 Insertion sort

3 Merge sort

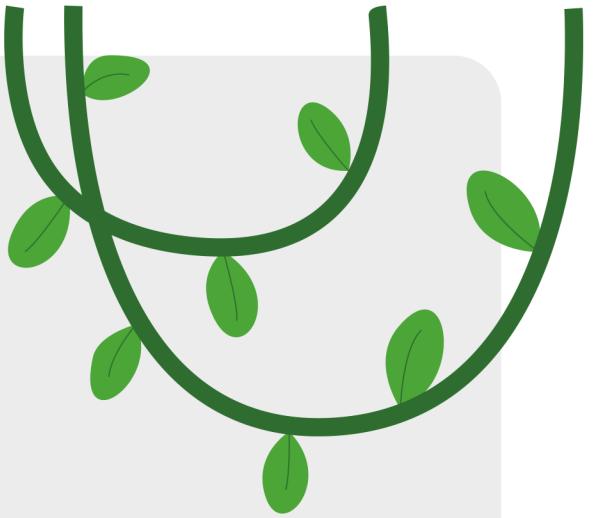
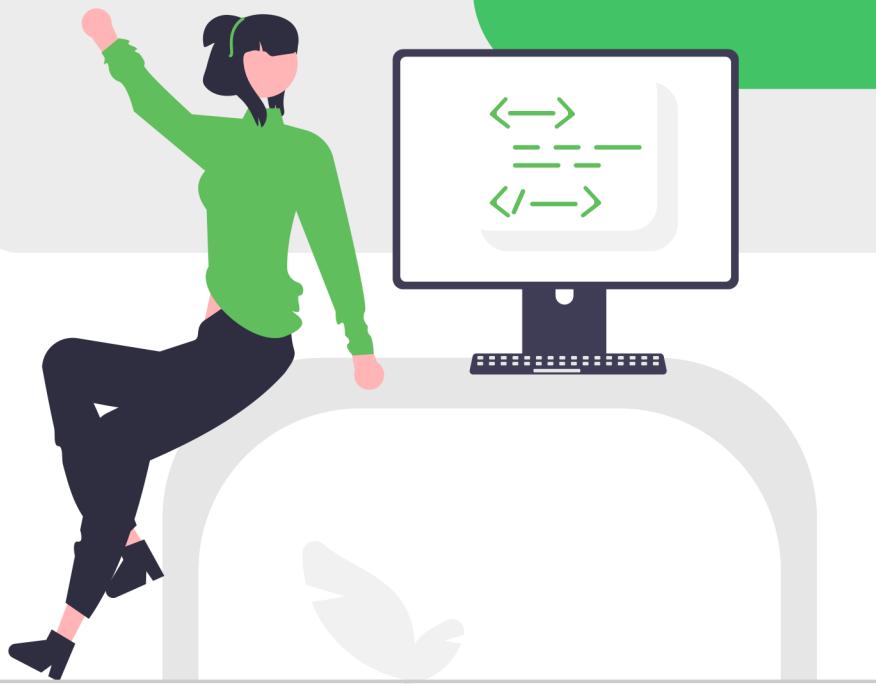
4 Quick sort

5 Selection sort



Selection sort

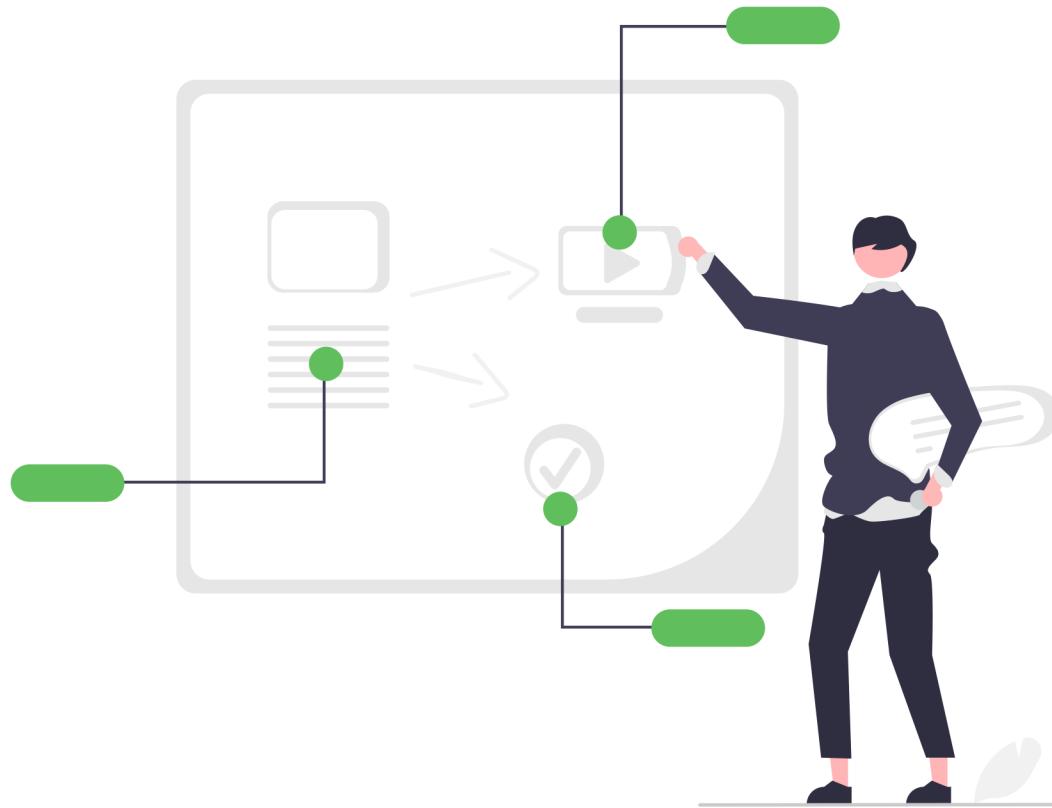
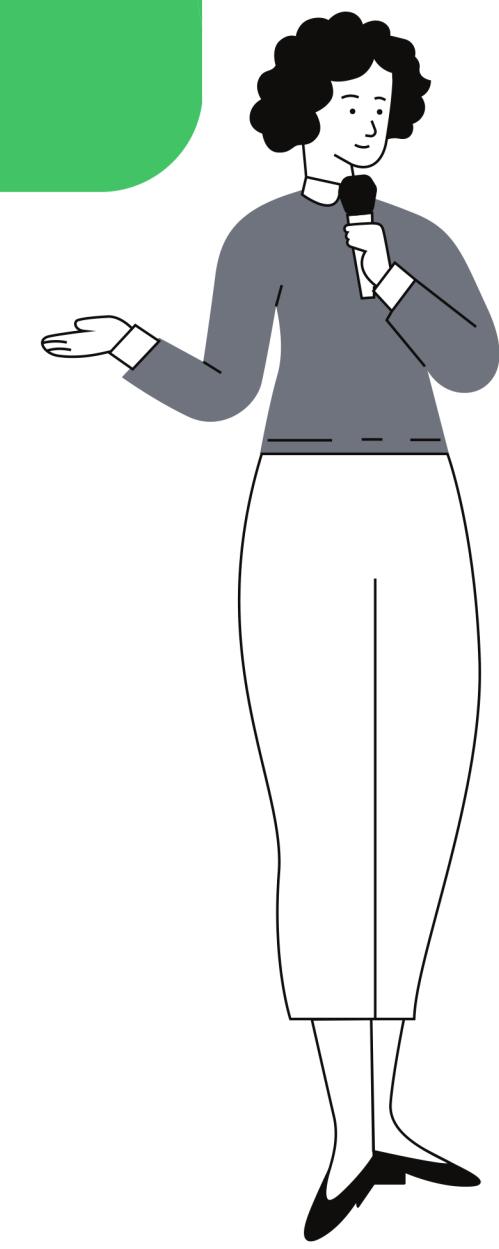
Selection sort is a simple sorting algorithm that sorts an array by repeatedly finding the minimum element from the unsorted part of the array and placing it at the beginning of the sorted part of the array



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Let's Understand  
It's Working With  
Example



# Example

1

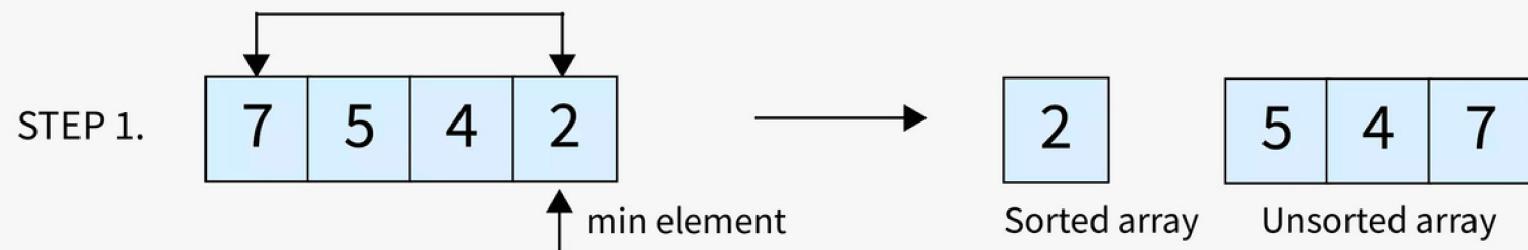
STEP 1

Let an array:- int arr[] = {7, 5, 4, 2};

1 Find the smallest element in the unsorted part of the array, which is 2.

2 Swap it with the first element of the unsorted part of the array.

3 The array now becomes [2, 5, 4, 7].



1

## STEP 2

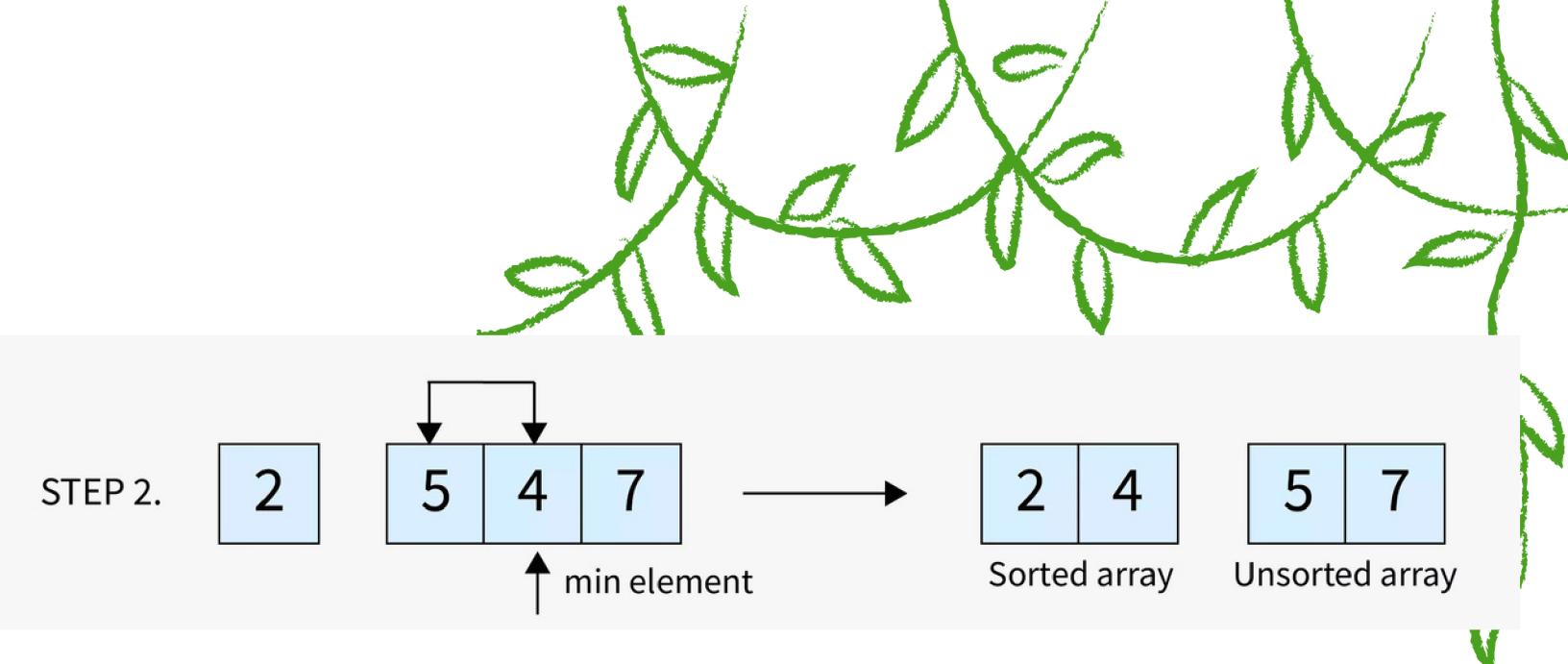
1 Find the smallest element in the unsorted part of the array, which is 2.

2

Swap it with the first element of the unsorted part of the array.

3

The array now becomes [2, 5, 4, 7].



1

## STEP 3

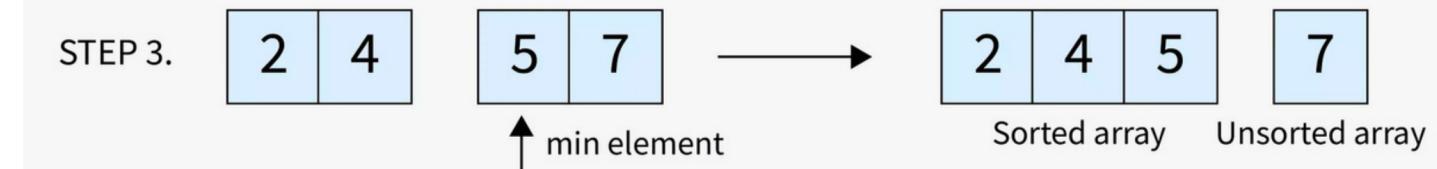
1 Find the smallest element in the remaining unsorted part of the array, which is 4.

2

Swap it with the second element of the unsorted part of the array.

3

The array now becomes [2, 4, 5, 7].



1

## STEP 4

1 The array is now sorted up to the third element.

2

Find the smallest element in the remaining unsorted part of the array, which is 7.

3

Swap it with the fourth element of the unsorted part of the array.

4

The array now becomes [2, 4, 5, 7].

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## STEP 5

1

The array is now fully sorted.

STEP 4.

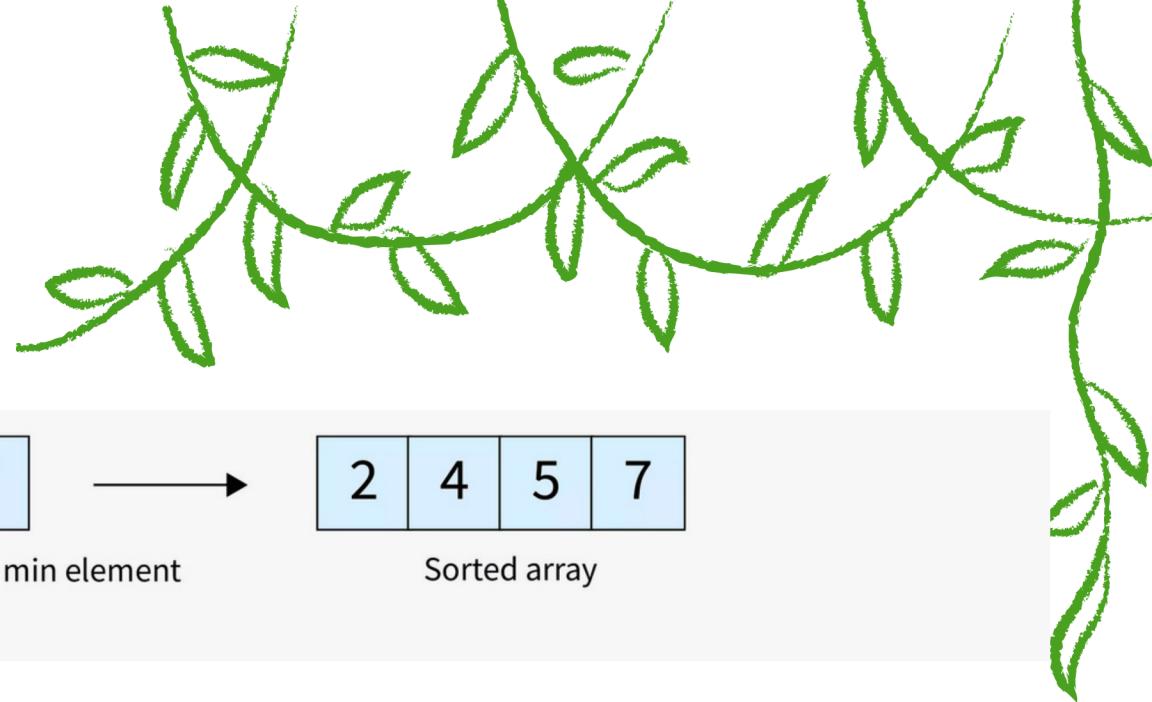
|   |   |   |
|---|---|---|
| 2 | 4 | 5 |
| 7 |   |   |

7

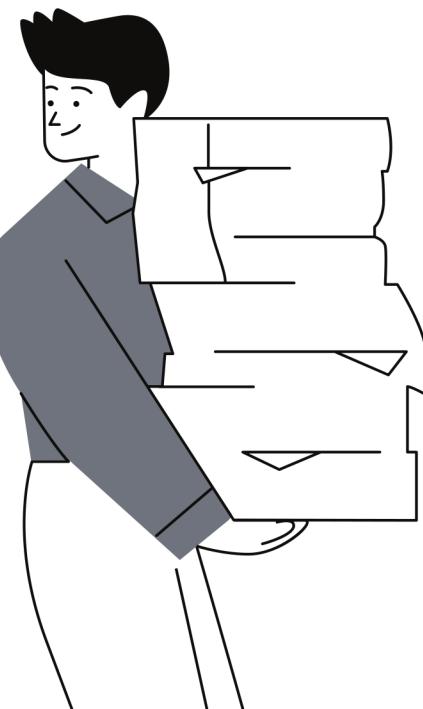
↑ min element

|   |   |   |   |
|---|---|---|---|
| 2 | 4 | 5 | 7 |
|---|---|---|---|

Sorted array



Done !



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BY .. 