Exercise 4: Quick Sort

For this exercise, you are required to implement the **Quick Sort algorithm** as shown in **example 2** and **example 3** of the slides (in-place partition).

You will need to implement the following:

- Function **quickSort2**
  - A **recursive function** that passes an array and two integers that indicate the range of the array (see the **pseudocode** in the slides).
- Function partition_2
  - A **partition function** that behaves as shown in example 2.
- Function quickSort3
  - A **recursive function** that passes an array and two integers that indicate the range of the array (see the **pseudocode** in the slides).
- **Function partition_3**
  - A **partition function** that behaves as shown in example 2.

Do NOT add any additional functions. Write ONLY where indicated.