In-class exercise:

1. Import NumPy in Jupyter notebook.
   1. Generate a 1D NumPy array of 10 random integers between 1 and 100.
   2. Access and print the first and last elements of the array.
   3. Generate a 2D NumPy array of shape (3, 3) with random floating-point numbers.
2. Use the 2D array generated in Exercise 1 c. Practice slicing arrays to access sub-arrays.
   1. Print the first row of the 2D array.
   2. Print the last column of the 2D array.
   3. Create and print a sub-array consisting of the first two rows and first two columns.
3. Generate two 1D NumPy arrays of 5 random integers each.
   1. Add the two arrays and print the result.
   2. Multiply the two arrays (element-wise) and print the result.
   3. Calculate the square of every element in the first array and print it.
4. Generate two 2D NumPy arrays, A of shape (2, 3) and B of shape (3, 2), with random integers.
   1. Perform matrix multiplication between A and B (using np.dot() or the @ operator) and print the result.
   2. Can A and B perform element-wise multiplication using \*, why?