

- **Mutable Data Types:** Can be changed after creation. Examples include lists, dictionaries, sets, and bytearray.
- **Immutable Data Types:** Cannot be changed after creation. Examples include integers, floats, strings, tuples, and frozensets.

Choosing between mutable and immutable types depends on the requirements of your application, such as the need for data integrity, performance considerations, and whether you need to ensure that objects do not change unexpectedly.

? Function: A reusable block of code not tied to any class. Defined with def and used independently.

? Method: A function defined within a class and associated with class instances or the class itself. It is called on an instance or the class and typically takes self or cls as the first parameter.

Custom Sorting Algorithms: Implement algorithms like

1. Bubble Sort
2. Insertion Sort
3. Selection Sort
4. Merge Sort
5. Quick Sort
6. Heap Sort for educational purposes or specialized needs.