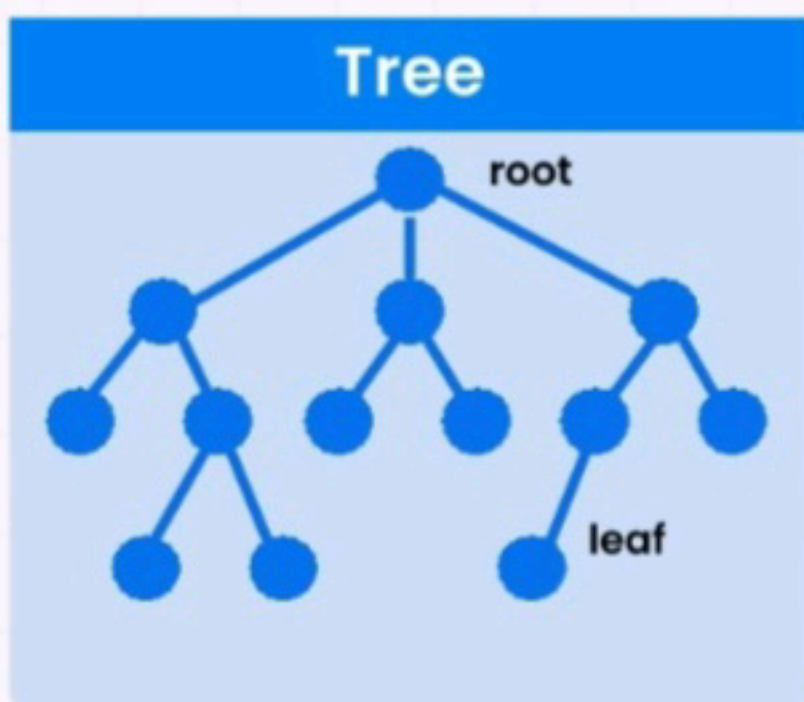


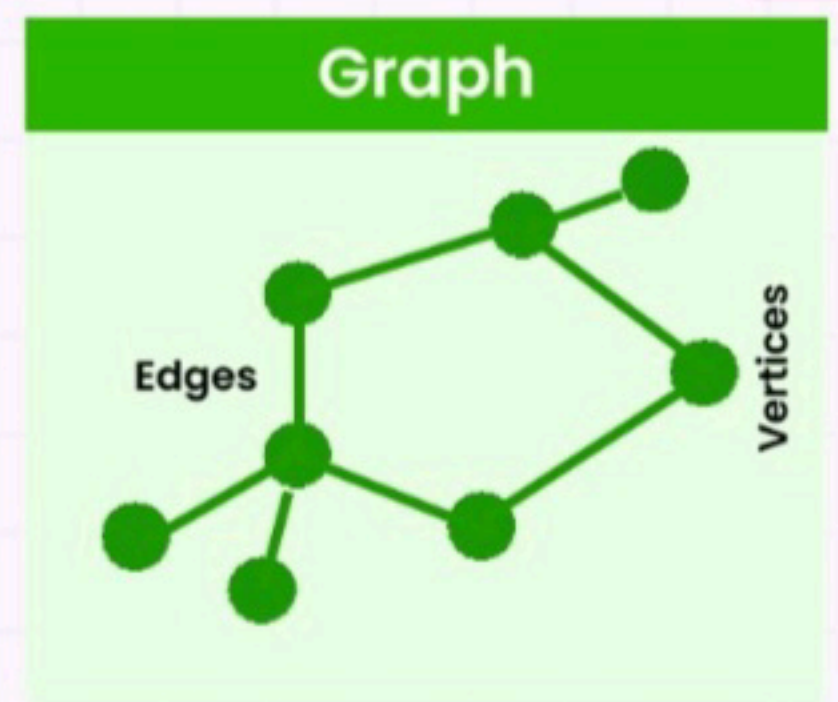
# Java Collections Framework



**Matrix**

	0	1	2	3	4	5
0						
1						
2						
3						
4						

Diagram illustrating a Matrix structure. The matrix is a 6x6 grid with indices 0 to 5 for both rows and columns.

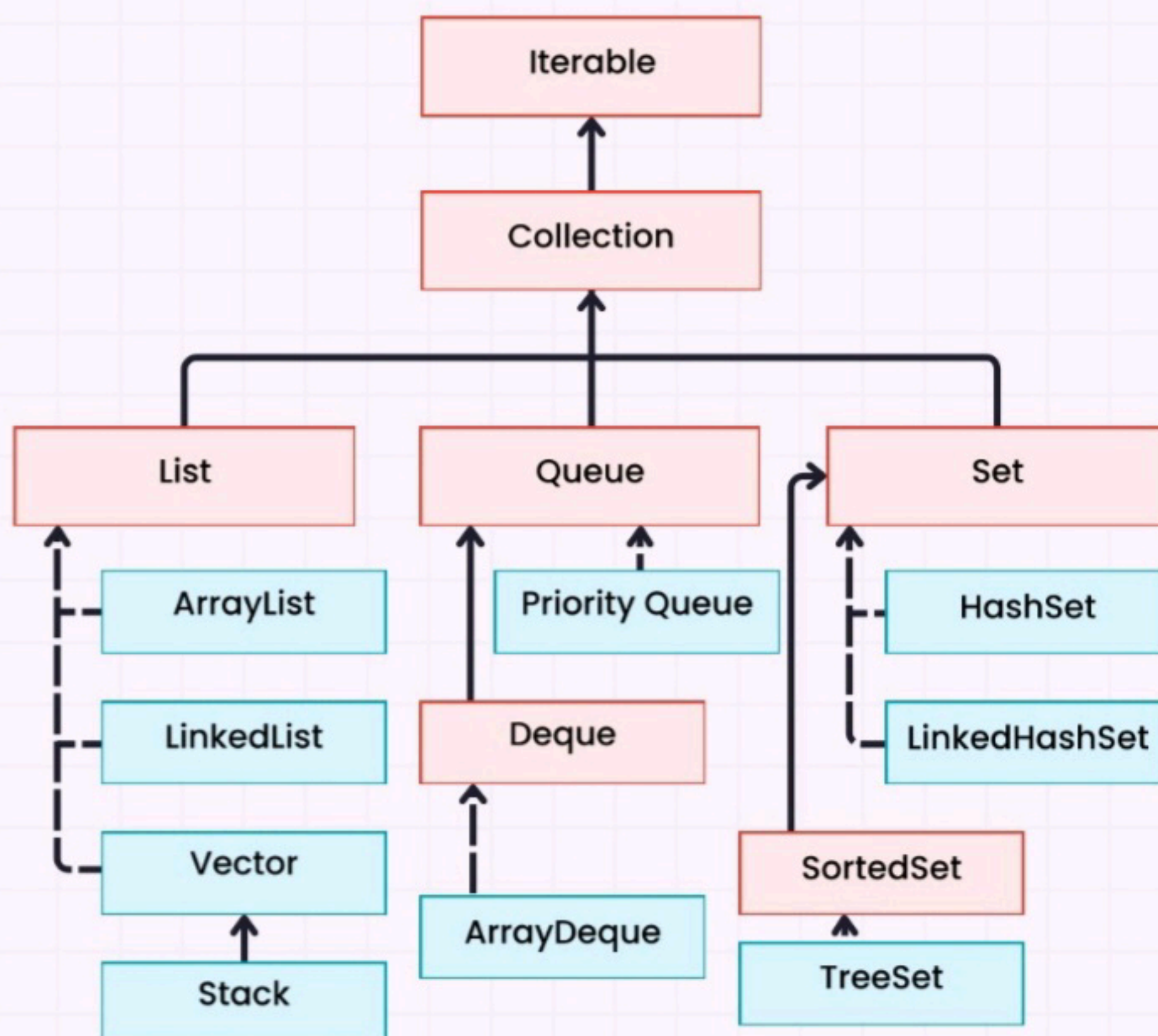




# Java Collections Framework

## Introduction

- The **Java Collections Framework (JCF)** is a fundamental part of the Java programming language, providing a set of classes and interfaces for storing and manipulating groups of data.
- The framework offers a range of collection types, including List, Set, and Map, each tailored for different use cases.
- It also provides mechanisms for sorting and comparing data, making it essential for efficiently handling large amounts of information in applications.
- In this chapter, we will cover the core collection types, compare HashMap and Hashtable, and explore the differences between Comparable and Comparator interfaces.





## 1. List, Set, Map

- The three most commonly used collection types in Java are List, Set, and Map.
- Each serves a distinct purpose in managing and storing elements.

