

### Task 9: Generic Classes and Methods

Implement a generic method that swaps the positions of two elements in an array, regardless of their type, and demonstrate its usage with different object types.

ANS:

```
package com.Day23;
import java.util.Arrays;
public class Task9 {
    // Generic method to swap two elements in an array
    public static <T> void swapElements(T[] array, int index1, int index2) {
        T temp = array[index1];
        array[index1] = array[index2];
        array[index2] = temp;
    }
    public static void main(String[] args) {
        // Swap elements in an Integer array
        Integer[] intArray = {1, 2, 3, 4, 5};
        System.out.println("Before swap: " + Arrays.toString(intArray));
        swapElements(intArray, 1, 3);
        System.out.println("After swap: " + Arrays.toString(intArray));
        // Swap elements in a String array
        String[] strArray = {"apple", "banana", "cherry", "date"};
        System.out.println("Before swap: " + Arrays.toString(strArray));
        swapElements(strArray, 0, 2);
        System.out.println("After swap: " + Arrays.toString(strArray));
    }
}
```