

Task 8: Generics and Type Safety

Create a generic Pair class that holds two objects of different types, and write a method to return a reversed version of the pair."

ANS:

```
package com.Day23;
public class Task8<T, U> {
    private T first;
    private U second;
    // Constructor
    public Task8(T first, U second) {
        this.first = first;
        this.second = second;
    }
    // Getters
    public T getFirst() {
        return first;
    }
    public U getSecond() {
        return second;
    }
    // Setters
    public void setFirst(T first) {
        this.first = first;
    }
    public void setSecond(U second) {
        this.second = second;
    }
    // Method to return a reversed version of the pair
    public Task8<U, T> reverse() {
        return new Task8<>(second, first);
    }
    // toString method for displaying the pair
    @Override
    public String toString() {
        return "Pair{" + "first=" + first + ", second=" + second + "}";
    }
    public static void main(String[] args) {
        // Example usage
        Task8<Integer, String> pair = new Task8<>(1, "One");
        System.out.println("Original Pair: " + pair);

        Task8<String, Integer> reversedPair = pair.reverse();
        System.out.println("Reversed Pair: " + reversedPair);
    }
}
```