Department Mathematik/Informatik, Abteilung Informatik
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Lecture Object-Oriented Software Engineering, SS 2024

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Exercise Sheet 2. Advanced Programming

Exercise 1. Generic Programming

Pull https://github.com/AdrianBajraktari/oose24.git to get a Java template for this exercise
(in src/exercise2/a1/GenericCopy.java). Implement a generic class method copy that takes
in a source list and a destination list as parameters. In your copy method, elements from the
source list are copied to the destination list. Think about how you might need wildcards.

[0 points]

Exercise 2. Memory Management

Get the C template code from https://github.com/AdrianBajraktari/oose24.git. In the file
Pointer.c, you will find different procedures for printing arrays, and comparing elements based on
different heuristics. Your task is to implement a simple sorting algorithm, like bubblesort, for an
integer array. However, you must make the condition under which a swap happens exchangeable,
e.g., by the three heuristics in the template. You may use a function pointer for this.
Hint: The typing of all predefined procedures are the same, so that you can easily derive the types
of the function pointer.
Hint: Use CLion as IDE for C/C++.

[0 points]

$\sum$ **0.0 points**