Implementation of DBMS
Exercise Sheet 8
Klingemann, WS 2024 / 2025

1) Insert the keys 20, 40, 10, 30, 15, 35, 7, 26, 18, 22, 5, 42, 13, 46, 27, 8, 32, 38, 24, 45, 25 in this order into an initially empty B+-tree of order 4.

2) Consider B+-trees of order 2. Give an example of a B+-tree with three levels whose set of keys could alternatively be represented in a B+-tree with two levels. Your example should consist of two trees, one with three levels and another one with two levels but the same set of keys.

3) Suppose we have a B+-tree of order 3. We continuously insert the keys 1, 2, 3, ... into an initially empty tree. At the insertion of what key will the B+-tree first reach four levels?