## Шайма бидан ALGORITHMS FUNDAMENTALS THEORY

КН 220 i.в

### **Laboratory Training 8**

*DYNAMIC PROGRAMMING*

**Objective:**

Learn how to use dynamic programming and assess its complexity.

**Task**:

Develop a program that reads the input and solves the problem using dynamic programming. Determine the complexity of the algorithm.

**Variant 5:** (*Find the longest common subsequence*)

*Find the longest common subsequence:*

The longest common subsequence problem is the problem of finding the longest subsequence common to all sequences in a set of sequences. It differs from the longest common substring problem: unlike substrings, subsequences are not required to occupy consecutive positions within the original sequences.

Suggested Code for this lab: