

Assignment 5:

Overview

The goal of this assignment is to familiarize students with P and NP problems.

Rules and Deliverables

- This is an individual assignment.
- Cheating of any kind is NOT tolerated! Assignments will be checked against each other, and illegal collaboration will be treated based on the University dishonesty policy.
- The due date will be **Wednesday 04/30/2025 at 11:59pm.**
- Submitting the assignment 24 hours after the due date will result in a deduction of 20% from the student's grade.
- Each student must write their answers in their own words in a document file and submit it as a PDF.

Assignment Description

Research the Traveling Salesman Problem (TSP) and:

1. Explain both the optimization and decision versions of this problem.
2. Analyze how the decision version of this problem is classified within computational complexity.