

Mathematical Modeling Project 2

In this project, you need to complete **Questions 1 and 2** from Problem A of the 2011 China Undergraduate Mathematical Contest in Modeling (CUMCM). Questions 3 and 4 are optional.

Requirements

1. Form a team of **no more than three members**, follow the provided report template, and collaboratively finalize the report.
2. You should format the report **using LaTeX**.
3. You are required to prepare presentation slides using either Beamer or PowerPoint. The presentation time for each group is 10 - 15 mins.
4. The programming language to be used is **not restricted**.

Notes

1. You can study and refer to the content of the exemplar report for guidance. The report can be found at 2011数学建模优秀论文A题.doc.
2. You are **encouraged** to use any AI tools, such as ChatGPT, DeepSeek and Claude, to generate a framework of the source code, assist with mathematical modeling and report writing. Please **describe** how you use the AI tools in your report.

Rules

1. **Deadline:** The deadline is **14:00, April 3(Thursday of the seventh academic week)**.
2. **Report:** The report should be easy to understand and describe each member's work well, especially the highlights of the work. The report must include the **names and Student ID** of all group members.
3. **Submission:** Please send the project to jzlisustc@gmail.com to keep record.

1. **Email Subject:** MM project 2-Team X(Replace "X" with your actual group number)

2. **Submission Content:**

- **Report:** Must be in **PDF format**.
- **Presentation Slides:** Must be in **PPT or PDF format**.

Attention: Only the submission of the report is required, the submission of source code is not necessary.

3. **Only one member per group** needs to submit the project.