

Pick **one** out of the following 11 problems (Q1-Q11) as your group project topic. The number in the parentheses is its page number in our text book.

- Q1 Generating Permutations (p144)
- Q2 Fake-Coin Problem (p152)
- Q3 Russian Peasant Multiplication (p153)
- Q4 The Game of Nim (p164)
- Q5 Gaussian Elimination (p208)
- Q6 String Matching (without using brute-force and Horspool's Algorithm) (p258)
- Q7 Coin-row problem (p285)
- Q8 Coin-collecting problem (p288)
- Q9 The Maximum-Flow Problem (p361)
- Q10 Maximum Matching in Bipartite Graphs (p372)
- Q11 The Stable Marriage Problem (p380)

The following figure illustrates the general algorithm design and analysis process for solving a given problem. You can follow this process to present your project. Coding the algorithm is optional (but welcome).

