## A Few Problems Aiming the Midterm Exam

- 1. An airline has four flights (4 flight numbers) from New-York to California and five flights (5 different flight numbers) from California to Hawaii per day. If the flights are to be made on separate days, how many different flight arrangements can the airline offer from New-York to Hawaii?
- 2. A car manufacturer provides cars with the following different variations:
  - Manual or automatic transmission
  - Three different stereo systems
  - Four possible exterior colors

How many different types of car the manufacturer sells?

- 3. How many different numbers can be constructed using a 64 bits binary digits?
- 4. A typical lisence plate number in Abu-Dhabi consists of 5 digits. How many different lisence plate numbers (excluding '00000') are possible that esnds with 2?
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- 6. How many different batting orders are possible for a baseball team consisting of 9 players?