## Chapter 6.1 Recoverable Operation Problem and Model

*Introduction:*

In this chapter, we discuss the possible problem and how DBMS help solve these problems and start from where, and discuss how to deal with these malfunctions.

*At first, we mainly discuss ‘System Malfunction’ or ‘Crash’, and the design of Logging and Recovery is used to recover these kind of errors. Also we will introduce the Buffer Management Model, it is the fundamental of the DBMS Recovery.* Also in the next chapter, we still need this model for several transactions to access the Database.

### Chapter 6.1.1 Malfunction Model

### Chapter 6.1.2 Further Discussion about Transaction

### Chapter 6.1.3 Right Execution about Transaction

### Chapter 6.1.4 Primitive Operation about Transaction