MODEL CHECKING OVERVIEW

1. The need of formal verification

To ensure the reliability of software, testing has been the major technique.With the idea of inputting data to the program and observing their results, testing executes it in a great number of cases to find out as many bugs as possible. However, this job is time consuming and remains more fatal errrors. On the other hand, the cost to fix errors found in this phase ( after implementation) is very high. Therefore, new techniques of verfication in the early phase must be

Formal verification techniques

1. Model cheching process
   1. Modelling
   2. Specification
   3. Verification