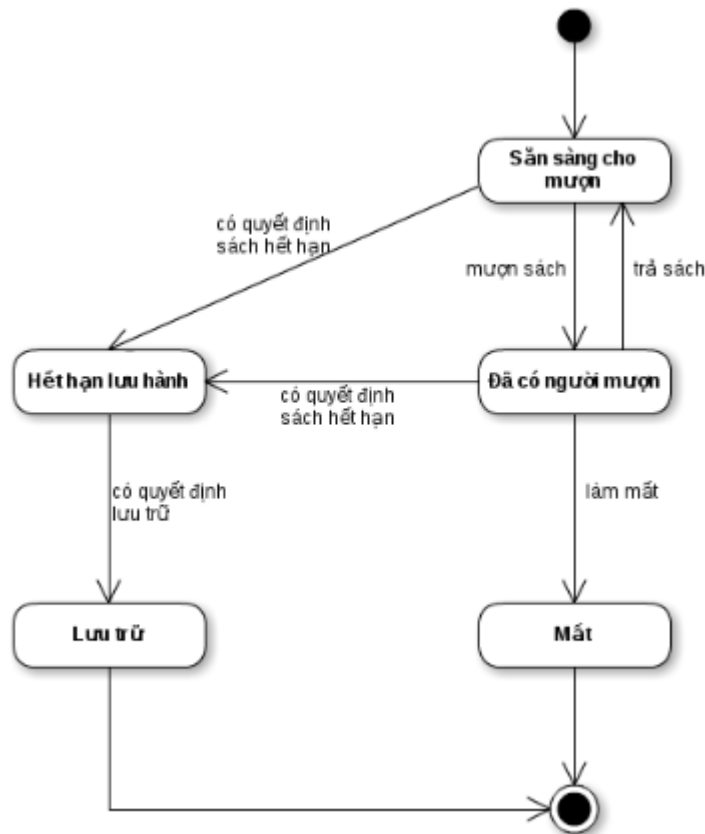


Question 1: (2.5)

Given the state-transition diagram representing the class Sach in alibrary management system, it can be described as follows: there are five main states: ready to lend, borrowed, and expired, borrowed, lost. and two sub-states are initialization state and termination state.



- Make state transition table
- Design testcase based on state transition table

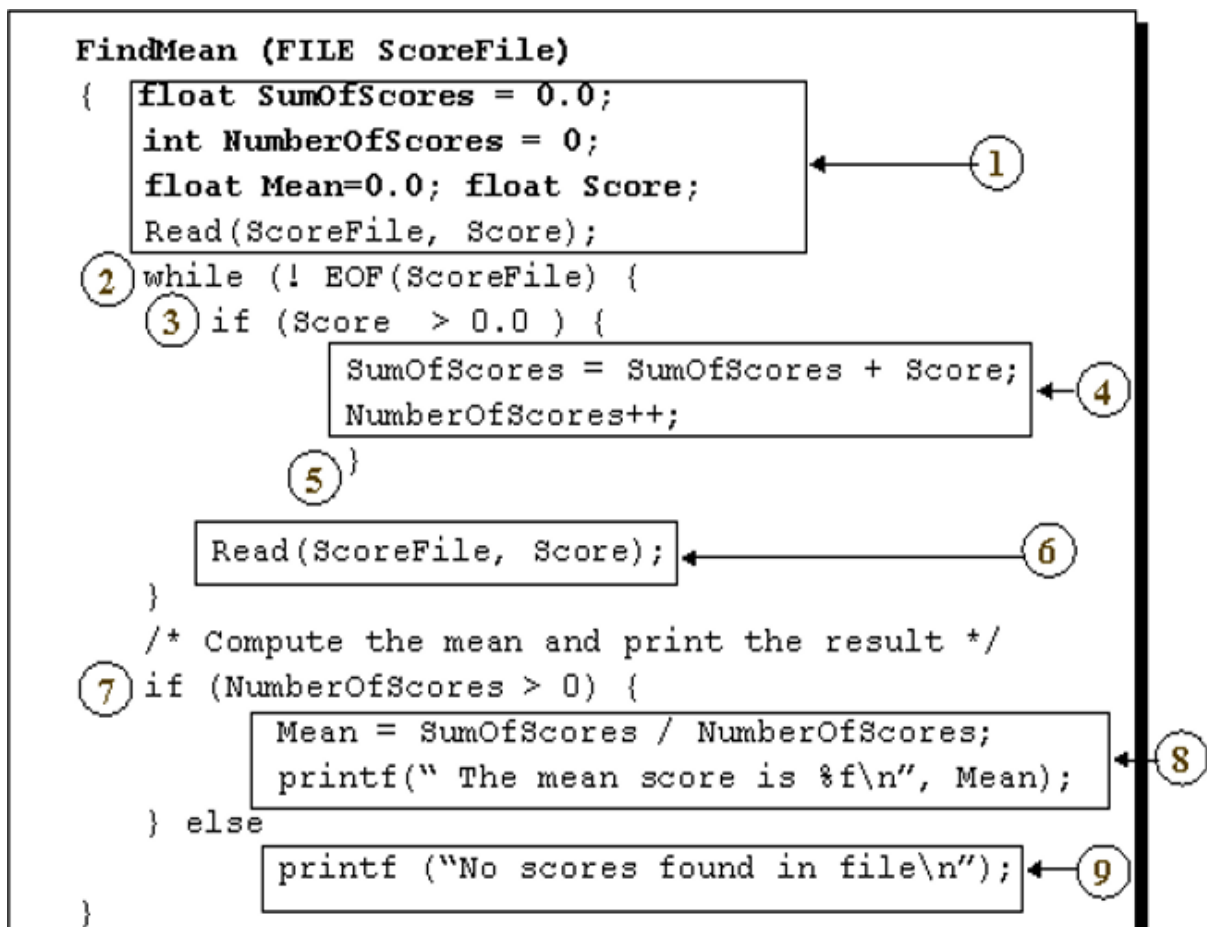
Question 2. (2.5):

- Attending Stateless University is an expensive proposition. After all, they receive no state funding. Like many other students, those planning on attending apply for student aid using FAFSA, the Free Application for Federal Student Aid. The following instructions were taken from that form. Examine them and create a decision table that represents the FAFSA rules. Step Four: Who is considered a parent in this step?
- Read these notes to determine who is considered a parent for purposes of this form. Answer all questions in Step Four about them, even if you do not live with them.
- Are you an orphan, or are you or were you (until age 18) a ward/dependent of the court? If Yes, skip Step Four. If your parents are both living and married to each other, answer the questions about them. If your parent is widowed or single, answer the questions about that parent. If your widowed parent is

remarried as of today, answer the questions about that parent and the person whom your parent married (your stepparent). If your parents are divorced or separated, answer the questions about the parent you lived with more during the past 12 months. (If you did not live with one parent more than the other, give answers about the parent who provided more financial support during the last 12 months, or during the most recent year that you actually received support from a parent.) If this parent is remarried as of today, answer the questions on the rest of this form about that parent and the person whom your parent married (your stepparent)

Apply for Decision table for designing testcase

Question 3. (2.5)



Apply for Control Flow/Coverage Testing, design testcase

Question 4 (2.5): Unit testing for **Question 3**, using NUnit. Or another tools