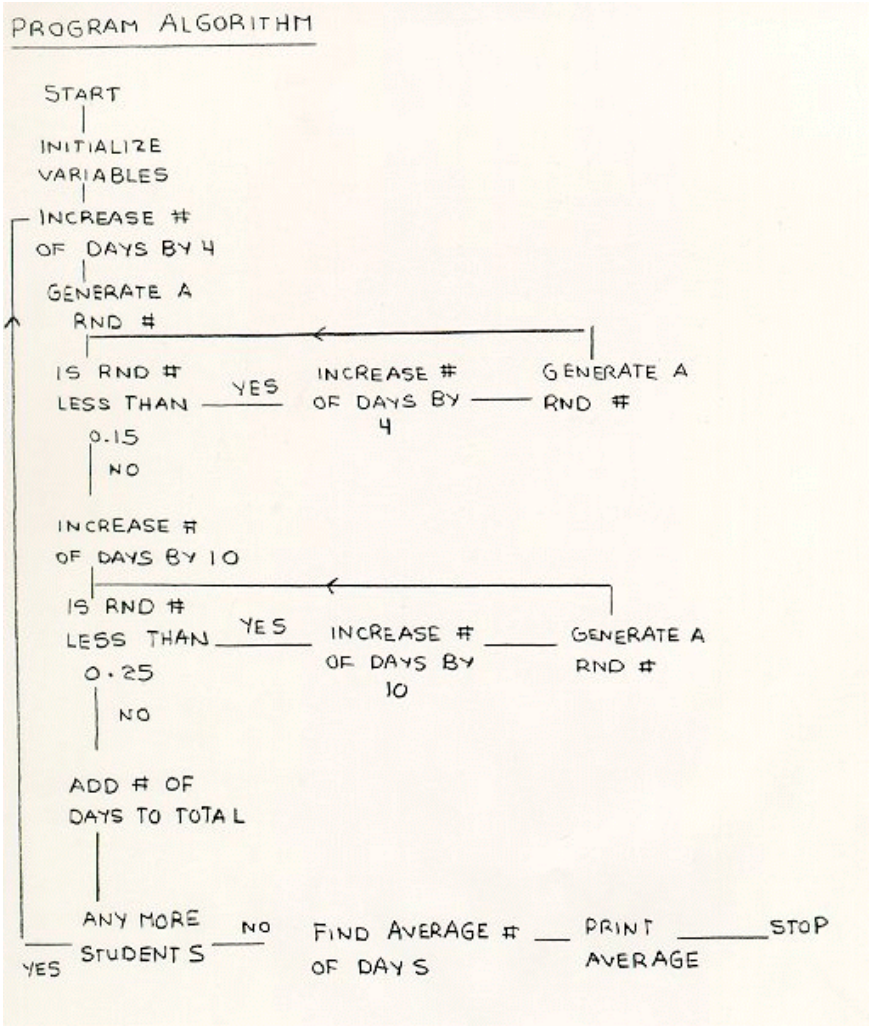
MORE PROBABILISTIC COMPUTER SIMULATIONS

DRIVING SCHOOL PROBLEM

On the average, one student enrols in the ACME Driving school each day. He or she has 4 days of classroom instruction and then writes a test. Less than 15% of the students fail the test and have to repeat the classroom instruction. All students then practice driving for 10 days. Less than 25% of the students fail the driving test and must repeat the driving lessons. The possibility of failing and repeating after having failed and repeated must be considered. However, it is assumed that all students who enter the school eventually do complete the course.

Write a program to find the average time it takes a student to complete the driver training course for 100 students who complete the course.



TENNIS SET SIMULATION

A tennis game between 2 players has the following rules:

(1) A point can be won by either player
(2) A game is won when one player has won at least 4 points and leads the opponent by at least two points.
(3) A set game is won when one player has won at least 6 games and leads by at least two games.

You are to simulate the playing of a set of tennis as follows:

The players are labeled 'A' and 'B'. You are asked to enter the probability P (in whole number %) that A will win any given point. Each game won by player A should be indicated by printing the letter A. If A loses the game, then B wins and the letter B should be printed. The winner of the set is indicated by printing in brackets the letter corresponding to the winner.

For Example a given set might be indicated by the sequence: ABBABAABAA (A)
You are to display the results of N sets, where N is entered by the user. After displaying the results of the N sets you are to display the summary line: PLAYER A WON ..... SETS OUT OF

Test your program with P=50 N=10
P=55 N=10
P=60 N=10