

Week 4 Lab: Designing Pseudocode & Flowchart: Repetition Problem

Question 1:

The distance a vehicle travels can be calculated as follows:

$$\text{distance} = \text{speed} * \text{time}$$

For example, if a train travels 40 miles per hour for 3 hours, the distance traveled is 120 miles. Write a pseudo code and draw a flow chart for a program that ask the user for the speed of a vehicle (in miles per hour) and how many hours it has traveled. The program should then use a loop to display the distance the vehicle has traveled for each hour of that time period. Here is an example of the expected output:

What is the speed of the vehicle in mph? 40
How many hours has it traveled? 3

Hour	Distance Traveled
1	40
2	80
3	120

Input Validation: Do not accept a negative number for speed and do not accept any value less than 1 for time traveled. Your program must produce error messages for these situation.

Question 2:

Refer to Lab 8, Exercise 3, No. 2 (pg. 121) of your lab module. Write a pseudo code and draw a flow chart for the question.

Instruction:

1. This lab **MUST** be submitted by **Tuesday (11/10/11)** before 4 p.m. to my office.
2. For all exercises, you are required to submit a **PRINTED hardcopy** for each.
3. Failure to submit this lab on time will cost you **5 marks/day**.