Problem statement:

Design and develop a program for ***Parking-Garage charges.*** A parking garage uses the following rate for the cars, truck, and bus:

CAR	BUS	TRUCK
First 3 hours 0.00	**First 2 hours 2.00**	**First 1 hours 3.75**
After 3 hours 1.25 per hour	**After 2 hours 2.50 per hour**	**After 1hours 4.50 per hour**
NO OVER NIGHT PARKING.		

OUTPUT DESIGN:

TYPE OF VEHICLE : CAR
TIME IN : HH:MM
TIME OUT: HH:MM
==========
TOTAL TIME PARKED: HH
TOTAL CHARGES:$999.99

INPUT DESIGN:

TYPE OF VEHCLE:X
HOURS IN :HH
MINUTES IN :MM
HOURS OUT :HH
MINUTES OUT :MM

INPUT VALIDATION: The program should not accept time that has HH less than 0 or greater than 23, and MM less than zero and greater than 59. Number of minutes should be only accepted as a positive number. Only valid vehicle type "C", "T", or "B" should be accepted.

IMPORTANT NOTE: If the total_minutes_parked is greater than 0, then you should round the total_hours_parked to the next hour (add one to it.) YOU MUST USE "FUCTION" calls, "if/else" control structures, and "switch" structures.

Items needed for this lab:

1. Problem statement (your version of problem statement), and OUTPUT DESIGN 10%
2. one structure chart (visio document) 10%
3. pseudo-code and flowchart of each module 10%
4. a complete project folder created in IDE with correct executable version of your C++ program 20%
5. Sample of INPUT 10%
6. Sample of OUTPUT 10%
7. User Instruction (at least 250 words.) 10%
8. Comment (your view on program solution, things you learned from this program.) 10%
9. Internal C++ program comments (for every one hundred line of code there should be at least thirty lines of internal comments.) 10%

NOTE: *Fully functional programs without syntax and logical errors would receive credit from items 1 – 9, others would receive ZERO (0).*
NO PARTIAL CREDIT ON PROGRAM THAT IS NOT FULLY FUCTIONAL.

YOU MAY WORK IN A GROUP OF TWO OR THREE TEAM MEMBERS, TEAM EFFORT IS ONLY FOR THE DESIGN, PSUEDOCODE/FLOWCHART PARTS OF THIS ASSIGNMENT NOT THE CODING PART OF THE ASSIGNMENT. PLAN TO ATTEND OPTIONAL WIMBA SESSIONS FOR THE DESIGN PHASE OF THIS PROJECT. I AM PLANNING TO CONDUCT VIRTUAL LAB TUTORIAL ON WIBMA FOR THIS LAB. PLEASE READ THE DISCUSSION BOARD AND YOUR EMAIL FOR ANNOUNCEMENT OF VIRTUAL LAB SESSIONS.