CIS 22B Lab 2

Topics:

Introduction to structures

Introduction to classes

Structures to classes

Object oriented design

Use the same format for problem and function headings as lab 1.

Problem 2.1

Declare a **structure** with a type name: Car

containing:

reportingMark a string of 5 or less upper case characters

carNumber an int

kind could be box, tank, flat, or other

loaded a bool

destination a string with a destination or the word NONE

Note: A destination is required if the car is loaded. If it is not

loaded the destination may be **either** a destination or the word NONE.

Create the following functions:

main

\* Uses new to obtain space for the data structure

\* Calls the other two functions

\* Deletes the space obtained using new

input

\* Read all the data from the user

\* After all the data has been read, put all this data into the structure

output

\* Print the data in a neat format

Put the main function first.

Use the function names and field names specified above.

Arrange the functions in the order listed above.

Test your program with the following data:

reportingMark SP

carNumber 12345

kind flat

loaded true

destination Salt Lake City

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Problem 2.2

Repeat problem 2.1 with the following changes:

Use **class** rather than struct with the type name: Car

Make the data in the class Car public.

Revise the input so the input function will only read the data from the

user, and then it will call an additional function named setUpCar which

will put the data into the object.

Test with the same data.