# WORKSHEET #6

## Assumes: Ch1, Ch2, Ch3, Ch5

1. Write a unit conversion program that asks the users from which unit they want to convert (fl oz., gal, oz., lb., in, ft., mi) and to which unit they want to convert (ml, l, g, kg, mm, cm, m, km). Reject incompatible conversions (such as gal -> km for example).

Program should ask for the value to be converted, use a switch statement to do the conversion, and then display the result:

Convert from? gal

Convert to? ml

Value? 2.5

2.5 gal is equivalent to 9463.5 ml

1. A minivan has two sliding doors. Each door can be opened by either a dashboard switch, its inside handle, or its outside handle. However, the inside handles do not work if a child lock switch is activated. In order for the sliding doors to open, the gear shift must be in park, and the master unlock switch must be activated. Your task is to write a program that handles a portion of the control software for the vehicle. The input is a sequence of values for the switches and the gear shift, in the following order:
   1. Dashboard switches for the left and right sliding door, child lock, and master unlock (0 for off and 1 for activated)
   2. Inside and outside handles on the left and right sliding doors (0 or 1)
   3. The gear shift setting (one of P N D 1 2 3 R)
   4. A typical input would be 0 0 0 1 0 1 0 0 P

Your program must validate the input with matches method. The valid input must be analyzed to give the following message: “left door opens” and/or “right door opens” as appropriate. If nether door opens, print “both doors stay closed”.

1. ☺