Program Assignment #1

A balance has the following size weights: 100 lb., 50 lb., 10 lb., 5 lb., and 1 lb. The number of 100 lb. and 50 lb. weights required to weigh an object whose weigh is \textbf{WEIGHT} pounds can be calculated using the following C++ statements:

// Determine the number of 100 lb. Weights
W100 = int(WEIGHT/100)

// Determine the number of 50 lb. Weights
W50 = int((WEIGHT – W100 * 100)/50)

Using these statements as a starting point, write a C++ program that calculates the number of each type of weight necessary to weight a 789 lb. object.

You will use the “\%” function to get the number of weights of each type. Turn in your listing and a printout of your output by \textbf{Sep. 18}. Be sure to include your name as a comment and to make your program interactive, i.e. use cout and cin statements to get the user to enter the weight of the object (like 789).

Hint: \texttt{n100 = 789\%100} would be the number of 100 lb. weights you would use and \texttt{789 –n100*100} would be the remaining part to be weighed.