

## Change Machine

Computer Science Society  
Programming Contest  
Fall 2011

When making change using quarters, dimes, nickels and pennies, a greedy strategy—giving coins from largest to smallest—succeeds in making the change amount using the least number of coins. In this problem, you are given amounts to make in change, and must write a program that computes and prints how to make the change amount using the least possible number of coins.

### *Input Format*

Each line of input contains a non-negative integer representing an amount in cents.

### *Output Format*

For each line of input containing an amount, print the amount and report the least number of coins (quarters, dimes, nickels, pennies) that can be given to make the change amount, as shown in the output sample below.

### *Input Sample*

87  
54  
79  
40

### *Output Sample*

87 cents:  
3 x 25 cents  
1 x 10 cents  
2 x 1 cents  
  
54 cents:  
2 x 25 cents  
4 x 1 cents  
  
79 cents:  
3 x 25 cents  
4 x 1 cents  
  
40 cents:  
1 x 25 cents  
1 x 10 cents  
1 x 5 cents