

16.216: ECE Application Programming

Fall 2014

Lecture 17: Key Questions

October 17, 2014

1. Write a function that:
 - Given two integer arguments, x and y , store the quotient and remainder of x / y into locations specified by arguments q and r , respectively.

PE3: Functions

This exercise functions on the “change problem”—write a program that will, given an amount of change to be returned, determine the minimum number of coins required to fulfill that amount. In this specific problem, the amount is \$2.00 or less, and the coins available are half dollars, quarters, dimes, nickels, and pennies.

Use the space below and on the following page to draw a flowchart for this program.

Under what circumstances do you use functions? Identify the best opportunity to use a function in this program, and draw a flowchart that incorporates the function, as well as calls to that function.