

# **ECE 161 Foundations of Computer Engineering II**

## **Lab Programming Assignment**

Write a standard C program that declares three one-dimensional arrays named `price`, `quantity`, and `amount`. Each array should be declared in `main( )` and should be capable of holding ten double-precision numbers.

The numbers that should be stored in `price` are: 10.62, 14.89, 13.21, 16.55, 18.62, 9.47, 6.58, 18.32, 12.15, 3.98.

The numbers that should be stored in `quantity` are: 4, 8.5, 6, 7.35, 9, 15.3, 3, 5.4, 2.9, 4.8.

Your program should pass these three arrays to a function called `extend( )`, which should calculate the `amount` array as the product of the corresponding elements in the `price` and `quantity` arrays.

After `extend( )` has put values into the `amount` array, the values in the array should be displayed – properly formatted – from within `main( )`.