Write a complete C++ program, including a good comment in each function and in the main function, to do the following:

Outline: You are running an online business that sells an item (of your choice). This program will (to a limited extent) keep track of inventory.

Part A does not use arrays, the focus was on functions with reference parameters.
Part B will use three parallel arrays. The arrays will store:

1. amount ordered
2. price of order
3. The third array is a boolean array. Each location stores true if the order was filled immediately, and false if there was a backorder for the order.

Details:

main:

In the main function, you will first do everything that you did in assignment 6A (a-c) and then you will call a function to perform each of d, e, and f:

NOTE: You will first have to modify your 6A program to store the number of items ordered and the price in the arrays, rather than in individual variables. However, the quantity_on_hand, and the back_ordered are still individual variables.

a. initialize variables
b. allow the user to place as many orders as he/she wants, restocking when necessary.
c. When the user is finished placing orders, print the number of orders placed.
d. After all orders are placed, call a function to calculate and print the total price of all orders.
e. Call a function to calculate and print the maximum number of items ordered.
f. Call a function to count the number of orders that were backordered. Print this number when you return back to main.

New functions for Part B:

d: Write a function called totalPrice that accepts an integer array and its number of elements. The function should iterate through the array and calculate the total of all elements in the array. The function should print the total.

e. Write a function called maxItems that accepts an integer array and its number of elements. The function should figure out the maximum in the array and prints that value.

g. Write a function called ordersBackordered. The function should accept a boolean array and its number of elements. The function should return the number of orders (i.e. a count) that had backorders. In other words, your function will iterate through the boolean array and count the false values.

Extra Credit: Have your function in part g accept a third array for use as output. Store the amount ordered of each order that had backorder in the third array. Print the third array when you return back to main. Hint: You will need a different index for use with the output array.