

Subroutine And Parameter Passing – Groceries

Write a program for a grocery store to calculate the total charge for customers following this algorithm:

1. In the main:
 - a) ask customer for the number of items that they are purchasing
 - b) check to see it is less than or equal to 20 items
 - c) pass that number to FillPriceArray subroutine and call FillPriceArray subroutine.
2. FillPriceArray subroutine:
 - a) fill the array and accumulate the prices sub total
 - b) return the sub total to main.
3. In the main:
 - a) ask customer for the number of coupons (it should be the same as the number of items)
 - b) pass the coupon number to FillCouponArray subroutine and call FillCouponArray subroutine to fill the CouponArray.
4. FillCouponArray subroutine:
 - a) fills the array and accumulate the discount total
*get the coupon amount:
The coupon should be less than item price and coupon should not be more than \$10
if the coupon is more than item price or exceed \$10 then you place 0 in the CouponArray for that coupon.
 - b) return coupon sum to main
5. In the main:
 - a) calculate the total charge by subtracting the total price from total discount coupons
 - b) output the total charge with a thank you message on the screen.

Example:

```
Please enter the number of item you are purchasing:
21
Sorry, too many items to purchase!!
Please enter number of items you are purchasing:
3
=====
Please enter the price of item 1:    10
Please enter the price of item 2:    10
Please enter the price of item 3:    20
=====
Please enter the number of coupons that you want to use.
4
Too many Coupons!! Please enter the number of coupons that you want to use.
3
Please enter the amount of coupon 1:  15
This coupon is not acceptable
Please enter the amount of coupon 2:   5
Please enter the amount of coupon 3:   5
=====
Your total charge is:      $30
Thank you for shopping with us.
```