

Camryn Rogers
cpr170030

Project 1 Pseudocode

processOrder()

Parameters: type of drink, size of cup, square inch price

Return type: double (cost)

If (it's a size small)

Surface area = $2(\pi)(2)(4.5)$

Ounces = 12

If (it's a size medium)

Surface area = $2(\pi)(2.25)(5.75)$

Ounces = 20

If (it's a size large)

Surface area = $2(\pi)(2.75)(7)$

Ounces = 32

If (soda)

Price per ounce = 0.2

If (tea)

Price per ounce = 0.12

If (fruit punch)

Price per ounce = 0.15

Return Cost = (ounces * price per ounce) + (square inch price * surface area)

promoteToGold()

Parameters: object, preferred array, regular array

Return type: void

Add element to preferred array

Add new preferred customer to that element

Remove element from regular, remove customer data

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giveDiscount()

Parameters: object

Return type: discount

If (amount spent is between 50 and 99)

Return 5% of their order

If (amount spent is between 100 and 149)

Return 10% of order

If (amount spent is between 150 and 199)

Return 15% of order

promoteToPlat()

Parameters: preferred array

Return type: void

Replace gold member object with platinum member object in array

Update bonus bucks

giveBonusBucks()

Parameters: object

Return type: void

Bonus bucks = order / 5

Assign to bonus bucks amount

addRegular()

Parameters: first name, last name, guest id, amount spent, array

Return type: void

Create object

Assign first name, last name, guest id and amount spent

Add to array

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addPreferred()

Parameters: first name, last name, guest id, amount spent, discount/bonus bucks

Return type: void

Create object

Assign first name, last name, guest id and amount spent

If (amount spent is < 200)

 Assign discount amount

If (amount spent >= 200)

 Assign bonus bucks amount

Add to array

Main:

Check to see if regular and preferred files exist and are not empty

If (regular exists and has info)

 While (has info)

 Add regular object, give it values

 Add to regular array

If (preferred exists and has info)

 While (has info)

 Add preferred object, give it values

 Add to preferred array

While (there's data in the orders file)

 If (invalid data)

 Ignore line

 Process order (need type of drink, size of cup, price per square inch)

 If (customer is gold)

 Apply discount

 If (customer is platinum)

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Apply bonus bucks

Add cost to amount spent for that customer

If customer has spent at least \$50

Promote to preferred (gold) status

Give discount

Total spent = total spent - discount

If customer has spent at least \$200

Promote to platinum

Give bonus bucks

Write regular customer data to regular file

Write preferred customer data to preferred file