ADT Descriptions

CLASS - ITEM
DATA
name:String - name of item
price:float - price of item
quantity:int - how many of the item there is
weight:int - the weight of the item
SALES_TAX:double - constant for sales tax
PREMIUM_SHIPPING - constant for premium shipping

OPERATIONS
calculatePrice():float - calculates and returns the total price of item with shipping
getName():String - returns the name of the item
getPrice():float - returns the price of the item without tax or shipping
getQuantity():int - returns the number of items in the shopping cart with that name
getWeight():int - returns the weight of the item
setName(String):void - sets the name of the item
setPrice(float):void - sets the price of the item
setQuantity(int):void - sets the number of that item in the shopping cart
setWeight(int):void - sets the weight of the item
printItemAttributes():void - prints the name, price, quantity, and weight of the item

CLASS - GROCERY
DATA
perishable:boolean - whether the item is perishable or not

OPERATIONS
isPerishable():boolean - returns whether the item is perishable or not
calculatePrice():float - calculates price with shipping and tax also adds premium shipping if item is perishable
printItemAttributes():void - prints attributes of the grocery item including whether it is perishable

CLASS - CLOTHING
OPERATIONS
calculatePrice():float - calculates price with shipping and sales tax

CLASS - ELECTRONICS

DATA

fragile:boolean - whether item is fragile or not

salesTax:boolean - whether item is shipping to a state with sales tax or not

OPERATIONS

calculatePrice():float - calculates price with shipping, premium shipping, and sales tax when applicable

isFragile():boolean - returns whether item is fragile

isSalesTax():boolean - returns whether item has sales tax

setFragile(boolean):void - sets whether item is fragile

setSalesTax(boolean):void - sets whether item has sales tax

printItemAttributes():void - prints out name,price,quantity,weight, whether item is fragile, and whether it has sales tax