

MEDGAR EVERS COLLEGE OF CUNY
CS 350: PROGRAMMING LANGUAGE PARADIGMS, FALL 2018, QUIZ HW5, 10/23/2019

Write the *isPrime* function and the *applyShippingCost* function. Then, complete the code as indicated at the end in comments

```
var cart=[
  {"name":"Biscuits", "type":"regular", "category":"food", "price": 2.0},
  {"name":"Monitor", "type":"prime", "category":"tech", "price": 120},
  {"name":"Mouse", "type":"prime", "category":"tech", "price": 25},
  {"name":"dress", "type":"regular", "category":"clothes", "price": 50},
  {"name":"XL Monitor", "type":"prime", "category":"tech", "price": 160},
  {"name":"Cookies", "type":"regular", "category":"food", "price": 16},
]

function isPrime(item) {
  //WRITE THIS FUNCTION
  //should return true if the item's type is "prime" and false otherwise
}

let isNotPrime = item => !isPrime(item);

let applyCoupon = (item) => {
  if (item.category === 'tech')
    item.price -= (item.price / 5);
  return item;
};

let applySalesTax = (item) => {
  const SALES_TAX = 6.00;
  item.price += (item.price / 100 * SALES_TAX);
  return item;
};

let applyShippingCost = (item) => {
  //WRITE THIS FUNCTION
  //it should add a $5 shipping cost to the item's price
};

function totalCost(cart){
  return cart.reduce((accumulator, item) => {
    accumulator += item.price;
    return accumulator;
  }, 0);
}
```

//RULES:

//Prime items do not have shipping cost
//Tech items have a coupon discount of 20%
//All items have a 6% sales tax

//COMPLETE THE CODE AS FOLLOWS:

// a single statement (chained filter's and map's) to get the total cost for prime items (should include the coupon discount if applicable and sales tax).

// a single statement (chained filter's and map's) to get the total cost for non-prime items (should include the coupon discount if applicable, shipping, and sales tax).