**Use-Case Realization**

**Purchase-** When a user chooses to make a purchase the console then prompts the user to enter the itemName, price, and quantity. After the user enters the information it will then be stored as an *Items* object. The object will be added to a *list* of Items to form a receipt. The receipt is then sent to a **calculation** method to calculate the total of the items where this total will be assigned to the subtotal variable. The subTotal will then be sent to a **tax** method to calculate the receiptTotal after the taxes are added. --> The tax method will be added separately because it will allow easier calculation for return and rebate checks. The receipt is then sent to the **print** method to be presented to the user. Then the receiptTotal is sent to the **print** method to be presented to the user. A reciptNumber is generated and added to the receipt and made viewable to the user. The receiptNumber will just be assigned through a count variable that increases with each purchase.

**Return Item-** The user is prompted to enter the receiptNumber, itemName, and quantity. Receipt is sent to **isValid** method where it checks to make sure that the receipt has not been rebated. If **isValid**, *Receipt* will be accessed and searched for any *Items* matching itemName and deletes the entry or entries. *Receipt* is sent to **calculation. Calculation** will be assigned to the subTotal variable. The subTotal is sent to **tax** where the new receiptTotal is assigned. An updated receipt will be assigned a new receiptNumber and the old receiptNumber is added to a *list* called notValid. Receipt is then printed and presented to the user along with the new receiptNumber.

**Enter Rebate-** The user is prompted to enter the month of the receipt being entered. The month is then checked if it is in a good month in the **isGood** method. If **isGood** then the user is prompted to enter the receiptNumber. receiptNumber is then sent to **isValid.** If **isValid** then then the receiptTotal is sent to the **calculateRebate** method. **calculateRebate** will take the receiptTotal and will calculate taxes and store that into taxes. Taxes is then subtracted from receiptTotal with the answer stored in subtotal. SubTotal is multiplied by rebatePercentage and the answer is stored in rebate.

**Generate Rebate Check-** Rebate is subtracted from subTotal and stored as newSub. newSub is sent to **tax**. What is returned from **tax** is stored as newTotal. newTotal is subtracted from receiptTotal and result is stored as rebateTotal. rebateTotal is then sent to **print** and is printed and presented to the user. receiptNumber is then added to notValid.