Test Matrix

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| calcItemToPounds Test Matrix | | | | | | | |
|  | Test Cases | | | | | | |
| Valid | Invalid | | | Boundary | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Inputs | | | | | | | |
| numOfItems | 2 | -1 | 4 | 5 | >0 | <1 | 4 |
| item | egg | (any) | wrong | (any) | (any) | (any) | (any) |
| Outputs | | | | | | | |
| totalItemLbs | 0.44 | -1 | -1 | -1 | 0 | 0 | <5 |
| Error |  | No Items. | Wrong Item. | Max Exceeded. |  |  |  |

Task: Convert number of items to weight in pounds and return pounds.

Inputs: item, numOfItems

Outputs: totalItemLbs

Validation: item must be in list array (egg, flour, sugar, butta), number of items must be greater than 0 and less than 4, total pounds for an item must be less than 5lbs

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Test Cases | | | | | | | |
| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| numOfItems | 2 | -1 | 4 | 5 | 0.1 | 0.25 | 4 |
| Item | egg | egg | EGG | egg | egg | egg | egg |
| itemToLbs | 0.22 | 0.22 | 0 | 0 | 0 | 0 | 0.22 |
| totalItemLbs | 0.44 | -1 | -1 | -1 | 0 | 0 | 0.88 |
|  |  |  |  |  |  |  |  |

BEGIN

IF (numOfItems >0 OR numOfItems <4)THEN

RETURN -1

IF (item == list[\*] )THEN

TRUE

ELSE

RETURN -1

IF (item == egg)THEN

itemToLbs = 0.22

IF (item == flour)THEN

itemToLbs = 0.275

IF (item == sugar)THEN

itemToLbs = 0.44

IF (item == butta)THEN

itemToLbs = 0.25

totalItemLbs = numOfItems \* itemToLbs

RETURN totalItemLbs

END

Test Matrix

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| calcWeightOfCart Test Matrix | | | | | | | |
|  | Test Cases | | | | | | |
| Valid | Invalid | | | Boundary | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Inputs | | | | | | | |
| items | egg | EGG | egg | egg | egg | egg | egg |
| itemTotalPounds | 0.44 | 0.44 | -1 | 26 | 0.01 | 0 | 25lbs |
| Outputs | | | | | | | |
| totalWeight | .44lbs | -1 | -1 | -1 | 0.01 | 0 | 25lbs |
|  |  | invalid item | Invalid weight | max weight exceeded |  |  |  |

Header: calcWeightOfCart(itemTotalPounds, item): double

Task: Convert number of items on person and weigh them so you know how much weight you are carrying.

Inputs: itemTotalPounds, items

Outputs: totalWeight

Validation: item must be in inventory and you can carry no more than 25lbs. item must be in list array (egg, flour, sugar, butta)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Test Cases | | | | | | | |
| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| itemTotalPounds | 0.44 | .44 | -1 | 26 | 0.01 | 0 | 25 |
| items | egg | EGG | egg | egg | egg | egg | egg |
| totalWeight | 0.44 | -1 | -1 | -1 | 0.01 | 0 | 25 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

BEGIN

CalcWeightTotal

if (totalWeight > 25 or > 0) THEN

RETURN -1

totalWeight = egg.itemTotalPound + butta.itemTotalPound + sugar.itemTotalPound + flour.itemPound;

After talking to you we realize that there are changes we are going to need to make but until we learn the correct ways this will have to do for now.

END

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| calcCostOfItems Test Matrix | | | | | | | |
|  | Test Cases | | | | | | |
| Valid | Invalid | | | Boundary | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Inputs | | | | | | | |
| numOfItems | 2 | -1 | 4 | 20 | 0 | 5 | (any) |
| costConversion | egg.cost | (any) | wrong | (any) | (any) | (any) | (any) |
| Outputs | | | | | | | |
| totalCost | $0.50 | $0.00 | $0.00 | $0.00 | $0.00 | $##.00 | $25.00 |
| error |  | No Items | Wrong Item | Max Exceeded |  |  |  |

**Function Signature:** calcCostOfItems (numOfItems, costConversion): double

**Inputs:** costConversion, numOfItems

**Outputs:** totalCost

**Validation:** Number of items cannot be negative, number of items cannot be greater than 5, total cost cannot be over $25.00

**Cost Conversions Per Unit as follows:** egg $0.25 , butta $1.00, sugar $2.50, flour $5.00

BEGIN

IF (numOfItems < 0 OR numOfItems > 5)THEN

RETURN -1

totalCost = totalCost + (numOfItems \* costConversion)

IF (totalCost > 25)THEN

RETURN -1

ELSE

RETURN totalCost

END

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Cases** | | | | | | | |
| **Variables** | **1** | **2** | **3** | **4** | **5** | **6** | **7** |
| numOfItems | 2 | -1 | 4 | 5 | 0.1 | 0.25 | 4 |
| Item | egg | egg | EGG | egg | egg | egg | egg |
| itemToLbs | 0.22 | 0.22 | 0 | 0 | 0 | 0 | 0.22 |
| totalItemLbs | 0.44 | -1 | -1 | -1 | 0 | 0 | 0.88 |
|  |  |  |  |  |  |  |  |