Project 3 - Candy Machine  
  
  
First step will have a menu-driven system  
  
- Create a menu in an endless while loop.  
  
- Selection of a menu item is to be in a switch  
statement.  
  
- Each number in the menu will list an item for sale,  
insert coins, and change return  
  
- when "insert money" (one of your menu items) is  
selected, go to a method, insertMoney(), to insert a  
coin and update the amount of credit in the machine,  
and increment each coin inserted.  
  
  
When an item is selected in your switch statement to  
buy  
  
- checks to see if enough money was deposited  
  
- checks to see if item is not sold out  
  
- dispense item  
  
- decrement that particular item count variable from  
the machine  
  
- for this part of the project, do not give the  
customer's change until they select "change return"  
from the menu  
  
  
  
vend() - create 2 vend methods (i.e. overloaded  
methods). One will take a String as an argument and one  
will take an int  
  
- if the item is sold out, (in other words the else  
part of the check) pass a string to the vend() method  
and have it print out the "sold out" message.  
  
- if the item is not sold out, pass the cost of the  
item being sold to the vend() method and have it  
decrement the credit the customer has in the machine.  
  
  
2 switches are recommended -  
  
4 global variables  
  
credit - amount of total money the customer has in the  
machine  
  
nickels  
  
dimes  
  
quarters  
  
  
  
insertMoney() method - this will ask the customer to  
insert coins. Have a switch-case nickel, dime, quarter,  
dollar bill and add each denomination to the credit  
variable  
  
  
  
changeReturn() NON-STATIC method - this will be called  
when the customer wants change. You will pass it  
nothing, give it the appropriate amount of quarters,  
dimes, and nickels (no dollars). It will return a  
string with nothing in it if everything is fine.  
However, if you run out of a certain coin, short-change  
the customer, put his credit at zero, and return a  
String from the changeReturn method to be displayed by  
the calling method. The String being returned from  
changeReturn() should inform the customer he's just  
been swindled.  
  
  
// example of an item which has been out of stock since  
the late 1970's  
  
Credit: $0.00  
  
0. Insert Money  
  
1. Twix 95 cents  
  
2. Snickers $1.00  
  
3. Marathon Bar 25 cents  
  
4. Change Return  
  
Selection: 3  
  
Please insert more money for this item.  
  
  
// example of giving change  
  
Credit: $0.75  
  
0. Insert Money  
  
1. Twix 95 cents  
  
2. Snickers $1.00  
  
3. Marathon Bar 25 cents  
  
4. Change Return  
  
Selection: 4  
  
Amount owed to you: $0.75  
  
Coins returned to you:  
  
quarters: 3  
  
dimes: 0  
  
nickels: 0  
  
  
  
Credit: $0.00  
  
0. Insert Money  
  
1. Twix 95 cents  
  
2. Snickers $1.00  
  
3. Marathon Bar 25 cents  
  
4. Change Return  
  
Selection:  
  
// example of inserting money  
  
Credit: $0.00  
  
0. Insert Money  
  
1. Twix 95 cents  
  
2. Snickers $1.00  
  
3. Marathon Bar 25 cents  
  
4. Change Return  
  
Selection: 0  
  
1. Insert nickel  
  
2. Insert dime  
  
3. Insert quarter  
  
4. Insert dollar bill  
  
3  
  
  
Credit: $0.25  
  
0. Insert Money  
  
1. Twix 95 cents  
  
2. Snickers $1.00  
  
3. Marathon Bar 25 cents  
  
4. Change Return  
  
Selection:  
  
  
  
// example of the machine ripping off the customer if  
there are not enough quarters  
  
Credit: $0.75  
  
0. Insert Money  
  
1. Twix 95 cents  
  
2. Snickers $1.00  
  
3. Marathon Bar 25 cents  
  
4. Change Return  
  
Selection: 4  
  
Ammount owed to you: $0.75  
  
Coins returned to you:  
  
quarters: 2  
  
dimes: 0  
  
nickels: 0  
  
Not enough changed returned to you, TOO BAD!  
  
  
Credit: $0.00  
  
0. Insert Money  
  
1. Twix 95 cents  
  
2. Snickers $1.00  
  
3. Marathon Bar 25 cents  
  
4. Change Return  
  
Selection:  
  
Sent from James T. Bible for class Intro to Algorithms/Prog Lab