

# Vending Machine

For this exercise, we are going to create a vending machine. You may work in groups of 2-3 on this problem. The vending machine should be able to do the following:

1. Store a list of items in an object with prices. The item/prices can be as follows:
  - a. Snickers for \$1.00
  - b. Gushers for \$0.50
  - c. Gum for \$0.25
  - d. Potato Chips for \$1.50
  - e. Soda for \$2.00
  - f. Water for \$1.00
2. There should be a function when called that returns all the items. This will represent a “screen” for a user
3. The user can be allowed to enter currency. Currency should be a double that is passed as a variable into a function. The following should happen:
  - a. If the value entered is not a double or integer, print an error message saying the incorrect value has been entered
  - b. If the value entered is correct, store the added amount to a placeholder variable that acts as a total tender
4. The user should be able to select an item. The selected item can be passed into a function as a parameter. The following should happen:
  - a. If passed in value does not exist in the stored items, print an error message to the user they have a wrong choice
  - b. If the item does exist, get the items price. Check the price against the amount tendered. If the user has entered enough money, dispense(aka return) the item. Otherwise print an error message stating not enough money has been entered
  - c. Remember to reduce the amount of change the user has left
5. Have a function that returns the users change.
  - a. If the user has inserted money into the machine, return the money
  - b. If they have not entered any money, print an error message stating no money has been entered
6. Store the items returned from the machine into the users “bag”. The bag should be an array

7. To complete the assignment, have the user purchase 3 items from the machine and store it in the users bag. Iterate through the bag and “eat” the items.
8. **BONUS:** Make the vending machine an object, and call the functions described above through the object