CENG 112 - Data Structures

Assignment 1: The Shopping App

You can see an example run of the shopping app given below. User inputs are written in bold. You don't have to implement exactly the same interface, you can use your own design. While designing your program, please make sure that your program is user friendly. Try to make your user inputs simpler like the given example.

<u>Example Run:</u>

Welcome to The Shopping App!
Please select an option:
[1]Go to shopping
[2]See the status of the fridge
[3]Exit
1
Please select an option:
[1]Add an item to the basket
[2]See the basket
[3]Finish shopping
1
Please select an item:
[1]tomato
[2]potato
[3]onion
[4]banana
[5]strawberry
[6]chicken
[7]beef
[8]fish
[9]coffee
[10]coke
[11]juice
[12]chocolate
[13]cake
[14]nuts
1
tomato is added to the basket
Please select an option:
[1]Add an item to the basket
[2]See the basket
[3]Finish shopping
1
Please select an item:

[1]tomato
[2]potato
[3]onion
[4]banana
[5]strawberry
[6]chicken
[7]beef
[8]fish
[9]coffee
[10]coke
[11]juice
[12]chocolate
[13]cake
[14]nuts
2
potato is added to the basket
Please select an option:
[1]Add an item to the basket
[2]See the basket
[3]Finish shopping
2
Basket contains: tomato,potato
Please select an option:
[1]Add an item to the basket
[2]See the basket
[3]Finish shopping
1
Please select an item:
[1]tomato
[2]potato
[3]onion
[4]banana
[5]strawberry
[6]chicken
[7]beef
[8]fish
[9]coffee
[10]coke
[11]juice
[12]chocolate
[13]cake
[14]nuts
5
strawberry is added to the basket

Basket is full now
Shopping is finished and going to fill the fridge
The fridge is filled
Please select an option:
[1]Go to shopping
[2]See the status of the fridge
[3]Exit
2
Remaining capacities of each compartments:
Vegetables and Fruits : 1000 grams
Meats : 5000 grams
Beverages : 4000 grams
Snacks : 2000 grams
Please select an option:
[1]Go to shopping
[2]See the status of the fridge
[3]Exit
1
Please select an option:
[1]Add an item to the basket
[2]See the basket
[3]Finish shopping
1
Please select an item:
[1]tomato
[2]potato
[3]onion
[4]banana
[5]strawberry
[6]chicken
[7]beef
[8]fish
[9]coffee
[10]coke
[11]juice
[12]chocolate
[13]cake
[14]nuts
6
chicken is added to the basket
Please select an option:
[1]Add an item to the basket
[2]See the basket
[3]Finish shopping

1
Please select an item:
[1]tomato
[2]potato
[3]onion
[4]banana
[5]strawberry
[6]chicken
[7]beef
[8]fish
[9]coffee
[10]coke
[11]juice
[12]chocolate
[13]cake
[14]nuts
9
coffee is added to the basket
Please select an option:
[1]Add an item to the basket
[2]See the basket
[3]Finish shopping
2
Basket contains: chicken,coffee
Please select an option:
[1]Add an item to the basket
[2]See the basket
[3]Finish shopping
1
Please select an item:
[1]tomato
[2]potato
[3]onion
[4]banana
[5]strawberry
[6]chicken
[7]beef
[8]fish
[9]coffee
[10]coke
[11]juice
[12]chocolate
[13]cake
[14]nuts

12
chocolate is added to the basket
Please select an option:
[1]Add an item to the basket
[2]See the basket
[3]Finish shopping
3
Shopping is finished and going to fill the fridge
The fridge is filled
Please select an option:
[1]Go to shopping
[2]See the status of the fridge
[3]Exit
2
Remaining capacities of each compartments:
Vegetables and Fruits : 1000 grams
Meats : 4000 grams
Beverages : 3750 grams
Snacks : 1750 grams
Please select an option:
[1]Go to shopping
[2]See the status of the fridge
[3]Exit
1
Please select an option:
[1]Add an item to the basket
[2]See the basket
[3]Finish shopping
1
Please select an item:
[1]tomato
[2]potato
[3]onion
[4]banana
[5]strawberry
[6]chicken
[7]beef
[8]fish
[9]coffee
[10]coke
[11]juice
[12]chocolate
[13]cake
[14]nuts

3
onion is added to the basket
Please select an option:
[1]Add an item to the basket
[2]See the basket
[3]Finish shopping
1
Please select an item:
[1]tomato
[2]potato
[3]onion
[4]banana
[5]strawberry
[6]chicken
[7]beef
[8]fish
[9]coffee
[10]coke
[11]juice
[12]chocolate
[13]cake
[14]nuts
7
beef is added to the basket
Basket is full now
Shopping is finished and going to fill the fridge
The fridge is filled
Please select an option:
[1]Go to shopping
[2]See the status of the fridge
[3]Exit
2
Remaining capacities of each compartments:
Vegetables and Fruits : 0 grams
Meats : 3000 grams
Beverages : 3750 grams
Snacks : 1750 grams
Please select an option:
[1]Go to shopping
[2]See the status of the fridge
[3]Exit
1
Please select an option:
[1]Add an item to the basket

[2]See the basket
[3]Finish shopping
1
Please select an item:
[1]tomato
[2]potato
[3]onion
[4]banana
[5]strawberry
[6]chicken
[7]beef
[8]fish
[9]coffee
[10]coke
[11]juice
[12]chocolate
[13]cake
[14]nuts
1
tomato is added to the basket
Please select an option:
[1]Add an item to the basket
[2]See the basket
[3]Finish shopping
1
Please select an item:
[1]tomato
[2]potato
[3]onion
[4]banana
[5]strawberry
[6]chicken
[7]beef
[8]fish
[9]coffee
[10]coke
[11]juice
[12]chocolate
[13]cake
[14]nuts
11
juice is added to the basket
Please select an option:
[1]Add an item to the basket

[2]See the basket
[3]Finish shopping
1
Please select an item:
[1]tomato
[2]potato
[3]onion
[4]banana
[5]strawberry
[6]chicken
[7]beef
[8]fish
[9]coffee
[10]coke
[11]juice
[12]chocolate
[13]cake
[14]nuts
13
cake is added to the basket
You cannot add any more items to the basket
Shopping is finished and going to fill the fridge
The fridge is filled
tomato couldn't be added to the fridge
Please select an option:
[1]Go to shopping
[2]See the status of the fridge
[3]Exit
2
Remaining capacities of each compartments:
Vegetables and Fruits : 0 grams
Meats : 3000 grams
Beverages : 2750 grams
Snacks : 1300 grams
Please select an option:
[1]Go to shopping
[2]See the status of the fridge
[3]Exit
3