

## Problem: Just Shopping with Mom

A friend of yours hears you know something about computer programming and has this idea for a program based on a popular children's series "Little Critter". Their idea is to create a program that simulates Little Critter's adventure going shopping with his Mom.

In this program you will read a series of shopping items available in the store along with their prices and quantities available. Little Critter has been given a sum of money from his Mother and asked to buy as many things from the store as he can. He has no concept of "value" and just thinks the more one can buy the better. Your task is to determine what is the largest \*quantity\* of items that Little Critter can buy.

Write a program that reads from shopData.txt, which contains the inventory of the store. The first line will be the number of items in the store. Each line after that will have the name of an item (single word) followed by an integer representing how many the store has and a decimal value for the cost of one item (see sample below). After reading the file, your program will get from the user (keyboard input) how much money Little Critter was given by his Mom to go shopping (decimal value always greater than zero). Your program will output how many items Little Critter bought along with a list of the items purchased. The order of the items purchased does not matter.



### Sample shopData.txt:

```
7
Milk 6 3.99
Jellybeans 6 0.25
Juice 10 4.25
Bread 4 2.49
Carrots 3 0.99
Hotdogs 2 1.99
Apples 5 3.49
```

### Sample User Interaction #1:

```
Money from Mom : 10
Little Critter bought 11 items
2 - Hotdogs
3 - Carrots
6 - Jellybeans
```

### Sample #2:

```
Money from Mom : 3.50
Little Critter bought 8 items
2 - Carrots
6 - Jellybeans
```

### Sample #3:

```
Money from Mom : 35.19
Little Critter bought 19 items
4 - Apples
4 - Bread
2 - Hotdogs
3 - Carrots
6 - Jellybeans
```

Student Name:

Question - Assessment:	Application /8	Communication /6
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Checklist for Peer/Self Evaluation of Programs: You will be give one full mark for each criterion in which you score either **Always** or **Excellent**. Marks will be deducted by  $\frac{1}{2}$  for every move to the left (as you approach **Never** or **Poor**).

Program Correctness (Application)

Criteria	Never	Some-times	Most of the time	Always	Comments
Design elements indicate correct idea for solution					
Correct program results					
Correct use of selection statements					
Correct use of repetition statements					
Correct breakup of methods					

Programming Style (Communication)

Criteria	Poor	Fair	Good	Excellent	Comments
Documentation					
Logical method names and variables					
Use of white space/indentation					
Program readability (Is the easy to read, follow and understand?)					