

```
1 import components.map.Map;
2 import components.simplereader.SimpleReader;
3 import components.simplereader.SimpleReader1L;
4
5 /**
6  *
7  * @author Vaishnavi Kasabwala
8  *
9  */
10 public final class HW20 {
11
12     /**
13      * Private constructor so this utility class cannot be instantiated.
14      */
15     private HW20() {
16     }
17
18     /**
19      * Inputs a "menu" of words (items) and their prices from the given file and
20      * stores them in the given {@code Map}.
21      *
22      * @param fileName
23      *         the name of the input file
24      * @param priceMap
25      *         the word -> price map
26      * @replaces priceMap
27      * @requires <pre>
28      * [file named fileName exists but is not open, and has the
29      *  format of one "word" (unique in the file) and one price (in cents)
30      *  per line, with word and price separated by ','; the "word" may
31      *  contain whitespace but no ',']
32      * </pre>
33      * @ensures [priceMap contains word -> price mapping from file fileName]
34      */
35     private static void getPriceMap(String fileName,
36                                     Map<String, Integer> priceMap) {
37
38         SimpleReader file = new SimpleReader1L(fileName);
39
40         while (!file.atEOS()) {
41             String str = file.nextLine();
42
43             String s1 = "";
44             String s2 = "";
45
46             for (int i = 0; i < str.length(); i++) {
47                 if (str.charAt(i) == ',') {
48                     s1 = str.substring(0, i);
49                     s2 = str.substring(i + 1, str.length());
50                 }
51             }
52
53             int price = Integer.parseInt(s2);
54             priceMap.add(s1, price);
55         }
56     }
57 }
```

```

58  /**
59   * Input one pizza order and compute and return the total price.
60   *
61   * @param input
62   *         the input stream
63   * @param sizePriceMap
64   *         the size -> price map
65   * @param toppingPriceMap
66   *         the topping -> price map
67   * @return the total price (in cents)
68   * @updates input
69   * @requires <pre>
70   * input.is_open and
71   * [input.content begins with a pizza order consisting of a size
72   * (something defined in sizePriceMap) on the first line, followed
73   * by zero or more toppings (something defined in toppingPriceMap)
74   * each on a separate line, followed by an empty line]
75   * </pre>
76   * @ensures <pre>
77   * input.is_open and
78   * #input.content = [one pizza order (as described
79   *                    in the requires clause)] * input.content and
80   * getOneOrder = [total price (in cents) of that pizza order]
81   * </pre>
82   */
83   private static int getOneOrder(SimpleReader input,
84                                  Map<String, Integer> sizePriceMap,
85                                  Map<String, Integer> toppingPriceMap) {
86
87       int total = 0;
88
89       while (!input.atEOS()) {
90           String str = input.nextLine();
91
92           if (sizePriceMap.containsKey(str)) {
93               int price = sizePriceMap.value(str);
94               total += price;
95           }
96
97           if (toppingPriceMap.containsKey(str)) {
98               int extra = toppingPriceMap.value(str);
99               total += extra;
100           }
101       }
102   }
103
104   return total;
105 }
106
107 }

```