Homework 20

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November 14, 2023

1. ```
   /**
   * Inputs a "menu" of words (items) and their prices from the given file and
   * stores them in the given {@code Map}.
   *
   * @param fileName
   *            the name of the input file
   * @param priceMap
   *            the word -> price map
   * @replaces {@code priceMap}
   * @requires <pre>
   * {@code [file named fileName exists but is not open, and has the
   *  format of one "word" (unique in the file) and one price (in cents)
   *  per line, with word and price separated by ','; the "word" may
   *  contain whitespace but not ',']}
   * </pre>
   * @ensures <pre>
   * {@code [priceMap contains word -> price mapping from file fileName]}
   * </pre>
   */

   public static void getPriceMap(String fileName, Map<String, Integer> priceMap){
       SimpleReader input = new SimpleReader1L(fileName);
       while (!input.atEOS()) {
           String thisLine = input.nextLine();
           String key = thisLine.substring(0, thisLine.indexOf(','));
           String thisValue = thisLine.substring(thisLine.indexOf(',') + 1);
           int value = Integer.parseInt(thisValue);
           priceMap.add(key, value);
       }
       input.close();
   }
   ```

2. ```
   /**
   * Input one pizza order and compute and return the total price.
   *
   * @param input
   *            the input stream
   * @param sizePriceMap
   *            the size -> price map
   * @param toppingPriceMap
   *            the topping -> price map
   * @return the total price (in cents)
   * @updates {@code input}
   * @requires <pre>
   * {@code input.is_open and
   * [input.content begins with a pizza order consisting of a size
   *  (something defined in sizePriceMap) on the first line, followed
   *  by zero or more toppings (something defined in toppingPriceMap)
   ```

```
*  each on a separate line, followed by an empty line]}
* </pre>
* @ensures <pre>
* {@code input.is_open and
* #input.content = [one pizza order (as described
*              in the requires clause)] * input.content and
* getOneOrder = [total price (in cents) of that pizza order]}
* </pre>
*/

private static int getOneOrder(SimpleReader input, Map<String, Integer> sizePriceMap, Map<Strin
    int size = sizePriceMap.value(input.nextLine());
    int price = size;
    String toppingString = input.nextLine();
    while(!toppingString.isEmpty()){
        int topping = toppingPriceMap.get(toppingString);
        price += topping;
        toppingString = input.nextLine();
    }
    return price;
}
```