CS 240 Final Part 1

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December 5, 2017

The GitHub folder can be found at https://github.com/Trainzack/CS240/tree/master/Final%20Part%201.

Contents

1 src/Inventory.java

```java
import java.io.FileNotFoundException;
import java.io.PrintWriter;
import java.io.UnsupportedEncodingException;

import java.io.PrintStream;
import java.util.Random;

/**
 * Simulates a simplified model of an In-N-Out.
 * @author eli
 *
 */

public class Inventory {

    // This is the PrintStream we will be writing to. This is to ease exporting
    the output to a file.
    //private static final PrintStream output = System.out;

    private static PrintWriter output;

    private static Random randomNumberGenerator = new Random();

    // What day of the month it is. Starts at DEC 1st, or 301.
    private static int day = 301;
```

```
25
26     // What is the last day to simulate (DEC 31st)
27     private static final int last_date = 331;
28
29     // How many customers we can hold in line
30     private static final int CUSTOMER_QUEUE_CAPACITY = 50;
31
32     // Represents how many days away the next shipment is.
33     private static int daysUntilNextShipment = 0;
34
35     // Represents which customer we're serving
36     private static int customerNumber = 1;
37
38     // This array contains the six menu items that customers can order.
39     @SuppressWarnings("unchecked") // This is okay because the new array is empty
40     private static ListInterface<FoodType>[] menuItems = new ListInterface[6];
41
42     // This dictionary contains the stacks of food items.
43     private static DictionaryInterface<FoodType, StackInterface<FoodItem>> stock =
        new SortedDictionaryLinkedData<>();
44
45     public static void main(String[] args) {
46
47
48         try {
49             output = new PrintWriter("output.txt", "ASCII");
50         } catch (FileNotFoundException | UnsupportedEncodingException e) {
51             e.printStackTrace();
52         }
53
54         init();
55         /*
56         for (int i = 0; i < menuItems.length; i++) {
57             output.println(i + ": " + menuItems[i].toString());
58         }*/
59
60         for (; day <= last_date; day++) {
61             runDay();
62         }
63
64         output.println("==========================================");
65         output.println("=== January 01 Log: =====================");
66         output.println("==========================================");
67         output.println();
68         output.println("This In-N-Out is shut down for having consistently low
    sales and customer satisfaction, despite high customer throughput. If only the
    higher-ups at In-N-Out waited until this data got back, then maybe they would
    have noticed that it was their own fault for not supplying the store with
    enough food.");
69         output.close();
70     }
71
72     /**
73      * Initializes all of the important variables, like menu items
74      */
75     private static void init() {
76
77         // Add the correct food types to each menu item by creating arrays
    containing the food items first, then making the lists based off of those
```

2

```
                arrays.
78
79              // (1) Burger - Bun, Patty, Lettuce, Tomato, Onion
80              FoodType[] burger = {FoodType.Bun, FoodType.Patty, FoodType.Lettuce,
        FoodType.Tomato, FoodType.Onion};
81              menuItems[0] = new FixedArrayList<>(burger);
82
83              // (2) Cheese Burger - Cheese, Bun, Patty, Lettuce, Tomato, Onion
84              FoodType[] cheeseBurger = {FoodType.Cheese, FoodType.Bun, FoodType.Patty,
        FoodType.Lettuce, FoodType.Tomato, FoodType.Onion};
85              menuItems[1] = new FixedArrayList<>(cheeseBurger);
86
87              // (3) Vegan lettuce wrap Burger - (NO Bun, No Patty),2 order of Lettuce,
        Tomato, Onion
88              FoodType[] veganBurger = {FoodType.Lettuce, FoodType.Lettuce, FoodType.
        Tomato, FoodType.Onion};
89              menuItems[2] = new FixedArrayList<>(veganBurger);
90
91              // (4) Burger No Onion - (No Onion), Bun, Patty, Lettuce, Tomato,
92              FoodType[] burgerNoOnion = {FoodType.Bun, FoodType.Patty, FoodType.Lettuce
        , FoodType.Tomato};
93              menuItems[3] = new FixedArrayList<>(burgerNoOnion);
94
95              // (5) Cheese Burger No Onion - (No Onion), Cheese, Bun, Patty, Lettuce,
        Tomato
96              FoodType[] cheeseBurgerNoOnion = {FoodType.Cheese, FoodType.Bun, FoodType.
        Patty, FoodType.Lettuce, FoodType.Tomato};
97              menuItems[4] = new FixedArrayList<>(cheeseBurgerNoOnion);
98
99              // (6) Burger No Tomato - (No Tomato), Bun, Patty, Lettuce, Onion
100             FoodType[] burgerNoTomato = {FoodType.Bun, FoodType.Patty, FoodType.
        Lettuce, FoodType.Onion};
101             menuItems[5] = new FixedArrayList<>(burgerNoTomato);
102
103             // Setup the stacks of food items
104             for (FoodType f : FoodType.values()) {
105                 stock.add(f, new LinkedDataStack<FoodItem>());
106             }
107
108         }
109
110     private static void receiveShipment() {
111         output.println("A new shipment arrived!");
112
113             // Create a random number of each type
114             // Put all new food items into their stacks
115             // (the morning shift wants to do as little work as possible, and doesn't
        care about FIFO, so they put the new food on top of the old food. If the
        management paid attention, they'd surely be reprimanded.)
116
117             // This is the number of food items we are receiving this shipment. We
        want 700-1000 items total
118             int goal = randomNumberGenerator.nextInt(301) + 700;
119
120             for (int i = 0; i < goal; i++) {
121
122                 // Select a random food type
123                 FoodType newType = FoodType.values()[randomNumberGenerator.nextInt(
        FoodType.values().length)];
```

3

```
124
125            // Create the new food item
126            FoodItem newItem = new FoodItem(day, newType);
127
128            // Add it to the correct stock
129            stock.getValue(newType).push(newItem);
130        }
131
132        // Randomly select the next shipment date
133        daysUntilNextShipment = randomNumberGenerator.nextInt(3) + 3;
134    }
135
136    private static int createCustomers(QueueInterface<Customer> customers, int
    hour) {
137
138        // How many customers decide to show up this hour
139        int customersThisHour = randomNumberGenerator.nextInt(99) + 1;
140
141        // How many customers couldn't fit into the queue
142        int lostCustomersHour = 0;
143
144        for (int i = 0; i < customersThisHour; i++) {
145            // Create the new customer
146            Customer newCustomer = new Customer(customerNumber);
147            customerNumber++;
148
149            // Check if the queue is full
150            if (i >= CUSTOMER_QUEUE_CAPACITY) {
151                lostCustomersHour++;
152            } else {
153                customers.enqueue(newCustomer);
154            }
155        }
156
157        // Print the results
158        output.print(hour + ":00 --- " + customersThisHour + " customers arrived")
    ;
159        if (lostCustomersHour > 0) {
160            output.print(" (" + lostCustomersHour + " were turned away)");
161        }
162        output.println(".");
163
164        return lostCustomersHour;
165    }
166
167    private static boolean enoughIngredients(ListInterface<FoodType> customerOrder
    ) {
168
169        // First, check to see if we are out of any of the food types we need
170
171        Object[] orderArray = customerOrder.toArray();
172
173        for (Object f : orderArray) {
174            if (stock.getValue((FoodType)f).size() <= 0) {
175                return false;
176            }
177        }
178
179        // An ugly hack to check for the one item that has double lettuce
```

4

```java
180        if (customerOrder == menuItems[2] && stock.getValue(FoodType.Lettuce).size
    () <= 1) {
181            return false;
182        }
183
184        return true;
185    }
186
187    /**
188     * Simulates a single day.
189     */
190    private static void runDay() {
191
192        output.println("==========================================");
193        output.println("=== December " + String.format("%02d",(day - 300)) + " Log
    : ====================");
194        output.println("==========================================");
195        output.println();
196
197        // Represents how many customers we lost today
198        int lostCustomerDay = 0;
199
200        // Represents how many of each menu item was ordered (i.e., the item in
    menuItems[0] will have its count in itemsOrdered[0])
201        int[] itemsOrdered = {0, 0, 0, 0, 0, 0};
202
203        // Represents how many of each type of food item has been wasted via
    spoiling (today)
204        DictionaryInterface<FoodType, Integer> foodWasted = new
    SortedDictionaryLinkedData<>();
205        for (FoodType f : FoodType.values()) {
206            foodWasted.add(f, new Integer(0));
207        }
208
209        customerNumber = 1;
210
211        // Represents customer orders. (Key is customer, value is menu item
    ordered)
212        DictionaryInterface<Customer, Integer> orders = new
    SortedDictionaryLinkedData<Customer, Integer>();
213
214        // Maybe receive shipment
215        if (daysUntilNextShipment <= 0) {
216            receiveShipment();
217        }
218
219        // Print out how much stocks we have
220
221        for (FoodType f : FoodType.values()) {
222
223            output.println("\t"+ f.getPlural() + " in stock: " + stock.getValue(f)
    .size());
224        }
225
226        // Go through every hour of the day (military time)
227        for (int hour = 10; hour <= 19; hour++) {
228
229
230            QueueInterface<Customer> customers = new FixedArrayQueue<>(
```

5

```
          CUSTOMER_QUEUE_CAPACITY);
231
232              // Generate customers
233              lostCustomerDay += createCustomers(customers, hour);
234
235              // Go through customer queue
236              while (!customers.isEmpty()) {
237                  Customer currentCustomer = customers.dequeue();
238                  // Select one of the menu items. This is the customer's order
239                  int orderNumber = randomNumberGenerator.nextInt(6);
240                  ListInterface<FoodType> curCustomerOrder = menuItems[orderNumber];
241
242                  // Check to see if we have enough ingredients
243                  if (enoughIngredients(curCustomerOrder)) {
244
245                      // Empty off the ingredients we will need
246                      for (int i = 0; i < curCustomerOrder.size(); i++) {
247                          stock.getValue(curCustomerOrder.view(i)).pop();
248                      }
249
250                      // Increment the amount of times this was ordered
251                      itemsOrdered[orderNumber] += 1;
252
253                      // Log order to dictionary
254                      orders.add(currentCustomer, new Integer(orderNumber + 1));
255
256                  } else {
257                      // We don't have enough ingredients, so we can't do it!
258                      lostCustomerDay++;
259                  }
260
261              }
262
263
264          }
265
266      // Check inventory
267      //  (The evening shift has to sort out morning shift's mess)
268      //  Sort it by copying stack to array, sorting, then copying array to
      stack
269      for (FoodType f : FoodType.values()) {
270
271          StackInterface<FoodItem> stack = stock.getValue(f);
272
273          // For some reason we have to do it this way to avoid an invalid cast
274          Object[] temp = stack.toArray();
275          // Check to make sure the stack isn't empty
276          if (temp != null) {
277              FoodItem[] items = new FoodItem[temp.length];
278
279              for (int i = 0; i < temp.length; i++) {
280                  items[i] = (FoodItem)temp[i];
281              }
282
283              stack.clear();
284              items = IterativeInsertionSort.sort(items);
285
286              // Put the items back in the stack
287              for (int i = 0; i < items.length; i++) {
```

```
288                    FoodItem curItem = (FoodItem)items[i];
289
290                    // Check to see if it is expired
291                    if (!curItem.isExpired(day)) {
292                        // It's still good, so put it on the shelf
293                        stack.push(curItem);
294
295                    } else {
296                        // It's gone bad, toss it and record the waste
297                        foodWasted.add(f, foodWasted.getValue(f) + 1);
298                    }
299
300                }
301            }
302
303        }
304
305        daysUntilNextShipment--;
306
307        // Now we print the end of day information log!
308
309        output.println();
310
311        output.println("---End of day inventory count---");
312
313        output.println("Customers lost today: " + lostCustomerDay);
314        output.println("Food expired today:");
315        for (FoodType f : FoodType.values()) {
316            output.println("\t" + f.getPlural() + ": " + foodWasted.getValue(f));
317        }
318        output.println("Orders served today:");
319        for (int i = 0; i < itemsOrdered.length; i++) {
320            output.println("\t#" + (i + 1) + " was ordered " + itemsOrdered[i] + "
    time(s).");
321        }
322
323        output.println("Successful customer order log:");
324        output.println(orders);
325
326        output.println("-------------------------------");
327        output.println();
328    }
329
330
331 }
```

2   src/FoodType.java

```
1 /**
2  * Represents the type of a single food item. Each type has an associated name,
     and expiry time (in days)
3  */
4
```

```java
 5
 6  public enum FoodType {
 7      Bun ("Bun", 5, "Buns"),
 8      Patty ("Patty", 4, "Patties"),
 9      Lettuce ("Lettuce", 3, "Lettuce"),
10      Tomato ("Tomato", 3, "Tomatoes"),
11      Onion ("Onion", 5, "Onions"),
12      Cheese ("Cheese", 2, "Cheese Slices")
13      ;
14      private final int expirationTime;
15      private final String name;
16      private final String plural;
17
18      private FoodType(String name, int expirationTime, String plural) {
19          this.name = name;
20          this.expirationTime = expirationTime;
21          this.plural = plural;
22      }
23
24      @Override
25      public String toString() {
26          return name;
27      }
28
29      /**
30       * Returns the amount of days that this type of food item lasts for
31       * @return An int represnting the number of days that this food item lasts for
32       */
33      public int getExpirationTime() {
34          return expirationTime;
35      }
36
37      public String getPlural() {
38          return plural;
39      }
40  }
```

3   src/FoodItem.java

```java
 1  /**
 2   * Represents a single, actual ingredient that exists. It has an expiry date and
 3      everything!
 4   * @author eli
 5   *
 6   */
 7  public class FoodItem implements Comparable<FoodItem> {
 7
 8      public int getExpiryDate() {
 9          return expiryDate;
10      }
11
12      // The day that this item will expire.
13      private int expiryDate;
```

```
14
15      // What type of food item this
16      private FoodType type;
17
18      /**
19       * Creates a new food item of the given type, and sets the expiration date
    accordingly
20       * @param curDate The current day, as an int.
21       * @param type What type of food item this is.
22       */
23      public FoodItem(int curDate, FoodType type) {
24          super();
25          this.type = type;
26          this.expiryDate = curDate + type.getExpirationTime();
27      }
28
29      /**
30       * Checks whether this food item is expired.
31       * @param curDate The day that it currently is, as an int
32       * @return True if expired, false if still good.
33       */
34      public boolean isExpired(int curDate) {
35          return curDate >= expiryDate;
36      }
37
38      public FoodType getType() {
39          return type;
40      }
41
42      @Override
43      public int compareTo(FoodItem arg0) {
44          return expiryDate - arg0.expiryDate;
45      }
46
47 }
```

4   src/Customer.java

```
1  /**
2   * Represents a single customer.
3   * @author eli
4   *
5   */
6  public class Customer implements Comparable<Customer> {
7
8      private int number;
9
10      public Customer(int number) {
11          super();
12          this.number = number;
13      }
14
15      @Override
```

```
16      public String toString() {
17          return "Customer " + number;
18      }
19
20      @Override
21      public int compareTo(Customer arg0) {
22          // TODO Auto-generated method stub
23          return number - arg0.number;
24      }
25
26  }
```

5 output.txt

```
1  ========================================
2  === December 01 Log: ===================
3  ========================================
4
5  A new shipment arrived!
6      Buns in stock: 162
7      Patties in stock: 124
8      Lettuce in stock: 137
9      Tomatoes in stock: 188
10     Onions in stock: 165
11     Cheese Slices in stock: 205
12  10:00 --- 10 customers arrived.
13  11:00 --- 32 customers arrived.
14  12:00 --- 30 customers arrived.
15  13:00 --- 21 customers arrived.
16  14:00 --- 31 customers arrived.
17  15:00 --- 79 customers arrived (29 were turned away).
18  16:00 --- 80 customers arrived (30 were turned away).
19  17:00 --- 54 customers arrived (4 were turned away).
20  18:00 --- 81 customers arrived (31 were turned away).
21  19:00 --- 26 customers arrived.
22
23  ---End of day inventory count---
24  Customers lost today: 324
25  Food expired today:
26      Buns: 0
27      Patties: 0
28      Lettuce: 0
29      Tomatoes: 0
30      Onions: 0
31      Cheese Slices: 0
32  Orders served today:
33      #1 was ordered 17 time(s).
34      #2 was ordered 22 time(s).
35      #3 was ordered 17 time(s).
36      #4 was ordered 23 time(s).
37      #5 was ordered 24 time(s).
38      #6 was ordered 17 time(s).
39  Successful customer order log:
```

```
40  {Customer 1: 3, Customer 2: 5, Customer 3: 3, Customer 4: 4, Customer 5: 6,
        Customer 6: 4, Customer 7: 2, Customer 8: 1, Customer 9: 6, Customer 10: 1,
        Customer 11: 5, Customer 12: 2, Customer 13: 4, Customer 14: 4, Customer 15: 1,
         Customer 16: 5, Customer 17: 2, Customer 18: 4, Customer 19: 5, Customer 20:
        6, Customer 21: 5, Customer 22: 5, Customer 23: 5, Customer 24: 6, Customer 25:
         6, Customer 26: 6, Customer 27: 4, Customer 28: 4, Customer 29: 5, Customer
        30: 3, Customer 31: 3, Customer 32: 5, Customer 33: 3, Customer 34: 4, Customer
         35: 3, Customer 36: 5, Customer 37: 5, Customer 38: 6, Customer 39: 4,
        Customer 40: 2, Customer 41: 1, Customer 42: 6, Customer 43: 1, Customer 44: 2,
         Customer 45: 3, Customer 46: 2, Customer 47: 4, Customer 48: 6, Customer 49:
        2, Customer 50: 5, Customer 51: 4, Customer 52: 6, Customer 53: 1, Customer 54:
         6, Customer 55: 2, Customer 56: 3, Customer 57: 1, Customer 58: 1, Customer
        59: 5, Customer 60: 1, Customer 61: 4, Customer 62: 6, Customer 63: 4, Customer
         64: 4, Customer 65: 5, Customer 66: 6, Customer 67: 2, Customer 68: 3,
        Customer 69: 2, Customer 70: 1, Customer 71: 1, Customer 72: 6, Customer 73: 5,
         Customer 74: 2, Customer 75: 4, Customer 76: 4, Customer 77: 5, Customer 78:
        2, Customer 79: 3, Customer 80: 5, Customer 81: 1, Customer 82: 2, Customer 83:
         3, Customer 84: 3, Customer 85: 2, Customer 86: 4, Customer 87: 1, Customer
        88: 2, Customer 89: 3, Customer 90: 2, Customer 91: 3, Customer 92: 1, Customer
         93: 6, Customer 94: 1, Customer 95: 2, Customer 96: 5, Customer 97: 4,
        Customer 98: 5, Customer 99: 2, Customer 100: 3, Customer 101: 2, Customer 102:
         4, Customer 103: 4, Customer 104: 5, Customer 105: 2, Customer 106: 3,
        Customer 107: 4, Customer 108: 5, Customer 109: 1, Customer 110: 5, Customer
        111: 4, Customer 112: 4, Customer 113: 6, Customer 114: 6, Customer 115: 5,
        Customer 116: 2, Customer 117: 2, Customer 118: 5, Customer 119: 3, Customer
        120: 1}
41  ------------------------------
42
43  =========================================
44  === December 02 Log: ====================
45  =========================================
46
47      Buns in stock: 59
48      Patties in stock: 21
49      Lettuce in stock: 0
50      Tomatoes in stock: 85
51      Onions in stock: 92
52      Cheese Slices in stock: 159
53  10:00 --- 58 customers arrived (8 were turned away).
54  11:00 --- 18 customers arrived.
55  12:00 --- 44 customers arrived.
56  13:00 --- 86 customers arrived (36 were turned away).
57  14:00 --- 74 customers arrived (24 were turned away).
58  15:00 --- 42 customers arrived.
59  16:00 --- 56 customers arrived (6 were turned away).
60  17:00 --- 18 customers arrived.
61  18:00 --- 14 customers arrived.
62  19:00 --- 3 customers arrived.
63
64  ---End of day inventory count---
65  Customers lost today: 413
66  Food expired today:
67      Buns: 0
68      Patties: 0
69      Lettuce: 0
70      Tomatoes: 0
71      Onions: 0
72      Cheese Slices: 0
73  Orders served today:
```

```
74      #1 was ordered 0 time(s).
75      #2 was ordered 0 time(s).
76      #3 was ordered 0 time(s).
77      #4 was ordered 0 time(s).
78      #5 was ordered 0 time(s).
79      #6 was ordered 0 time(s).
80 Successful customer order log:
81 {}
82 ------------------------------

83
84 ========================================
85 === December 03 Log: ===================
86 ========================================

87
88      Buns in stock: 59
89      Patties in stock: 21
90      Lettuce in stock: 0
91      Tomatoes in stock: 85
92      Onions in stock: 92
93      Cheese Slices in stock: 159
94 10:00 --- 18 customers arrived.
95 11:00 --- 33 customers arrived.
96 12:00 --- 3 customers arrived.
97 13:00 --- 90 customers arrived (40 were turned away).
98 14:00 --- 2 customers arrived.
99 15:00 --- 53 customers arrived (3 were turned away).
100 16:00 --- 97 customers arrived (47 were turned away).
101 17:00 --- 37 customers arrived.
102 18:00 --- 76 customers arrived (26 were turned away).
103 19:00 --- 93 customers arrived (43 were turned away).

104
105 ---End of day inventory count---
106 Customers lost today: 502
107 Food expired today:
108      Buns: 0
109      Patties: 0
110      Lettuce: 0
111      Tomatoes: 0
112      Onions: 0
113      Cheese Slices: 159
114 Orders served today:
115      #1 was ordered 0 time(s).
116      #2 was ordered 0 time(s).
117      #3 was ordered 0 time(s).
118      #4 was ordered 0 time(s).
119      #5 was ordered 0 time(s).
120      #6 was ordered 0 time(s).
121 Successful customer order log:
122 {}
123 ------------------------------

124
125 ========================================
126 === December 04 Log: ===================
127 ========================================

128
129 A new shipment arrived!
130      Buns in stock: 227
131      Patties in stock: 194
132      Lettuce in stock: 172
```

```
133        Tomatoes in stock: 256
134        Onions in stock: 252
135        Cheese Slices in stock: 146
136 10:00 --- 78 customers arrived (28 were turned away).
137 11:00 --- 45 customers arrived.
138 12:00 --- 17 customers arrived.
139 13:00 --- 57 customers arrived (7 were turned away).
140 14:00 --- 10 customers arrived.
141 15:00 --- 46 customers arrived.
142 16:00 --- 32 customers arrived.
143 17:00 --- 99 customers arrived (49 were turned away).
144 18:00 --- 40 customers arrived.
145 19:00 --- 45 customers arrived.
146
147 ---End of day inventory count---
148 Customers lost today: 317
149 Food expired today:
150        Buns: 0
151        Patties: 0
152        Lettuce: 0
153        Tomatoes: 85
154        Onions: 0
155        Cheese Slices: 0
156 Orders served today:
157        #1 was ordered 28 time(s).
158        #2 was ordered 29 time(s).
159        #3 was ordered 20 time(s).
160        #4 was ordered 21 time(s).
161        #5 was ordered 28 time(s).
162        #6 was ordered 26 time(s).
163 Successful customer order log:
164 {Customer 1: 6, Customer 2: 1, Customer 3: 4, Customer 4: 3, Customer 5: 5,
        Customer 6: 6, Customer 7: 3, Customer 8: 1, Customer 9: 3, Customer 10: 6,
        Customer 11: 6, Customer 12: 2, Customer 13: 2, Customer 14: 3, Customer 15: 3,
         Customer 16: 5, Customer 17: 2, Customer 18: 2, Customer 19: 5, Customer 20:
        3, Customer 21: 5, Customer 22: 5, Customer 23: 2, Customer 24: 5, Customer 25:
         4, Customer 26: 6, Customer 27: 3, Customer 28: 5, Customer 29: 1, Customer
        30: 4, Customer 31: 1, Customer 32: 4, Customer 33: 6, Customer 34: 2, Customer
         35: 1, Customer 36: 1, Customer 37: 2, Customer 38: 2, Customer 39: 5,
        Customer 40: 4, Customer 41: 5, Customer 42: 5, Customer 43: 3, Customer 44: 2,
         Customer 45: 1, Customer 46: 3, Customer 47: 5, Customer 48: 2, Customer 49:
        5, Customer 50: 1, Customer 79: 6, Customer 80: 2, Customer 81: 1, Customer 82:
         5, Customer 83: 2, Customer 84: 1, Customer 85: 5, Customer 86: 6, Customer
        87: 4, Customer 88: 6, Customer 89: 5, Customer 90: 4, Customer 91: 2, Customer
         92: 2, Customer 93: 2, Customer 94: 5, Customer 95: 2, Customer 96: 3,
        Customer 97: 3, Customer 98: 1, Customer 99: 6, Customer 100: 6, Customer 101:
        2, Customer 102: 1, Customer 103: 4, Customer 104: 5, Customer 105: 2, Customer
         106: 6, Customer 107: 3, Customer 108: 2, Customer 109: 4, Customer 110: 3,
        Customer 111: 6, Customer 112: 2, Customer 113: 1, Customer 114: 4, Customer
        115: 2, Customer 116: 6, Customer 117: 6, Customer 118: 2, Customer 119: 5,
        Customer 120: 2, Customer 121: 4, Customer 122: 5, Customer 123: 6, Customer
        124: 1, Customer 125: 4, Customer 126: 2, Customer 127: 6, Customer 128: 4,
        Customer 129: 5, Customer 130: 1, Customer 131: 5, Customer 132: 3, Customer
        133: 6, Customer 134: 1, Customer 135: 1, Customer 136: 4, Customer 137: 6,
        Customer 138: 6, Customer 139: 6, Customer 140: 5, Customer 141: 6, Customer
        142: 2, Customer 143: 4, Customer 144: 4, Customer 145: 5, Customer 146: 2,
        Customer 147: 6, Customer 148: 6, Customer 149: 6, Customer 150: 4, Customer
        151: 3, Customer 152: 1, Customer 153: 2, Customer 154: 3, Customer 155: 1,
        Customer 156: 5, Customer 157: 6, Customer 158: 4, Customer 159: 3, Customer
```

```
      160: 4, Customer 161: 1, Customer 162: 5, Customer 163: 5, Customer 164: 5,
      Customer 165: 2, Customer 166: 1, Customer 167: 1, Customer 168: 1, Customer
      169: 4, Customer 170: 1, Customer 171: 3, Customer 172: 3, Customer 173: 1,
      Customer 174: 2, Customer 175: 1, Customer 176: 3, Customer 177: 1, Customer
      178: 1, Customer 179: 4, Customer 180: 5}
--------------------------------


========================================
=== December 05 Log: ===================
========================================

      Buns in stock: 95
      Patties in stock: 62
      Lettuce in stock: 0
      Tomatoes in stock: 45
      Onions in stock: 149
      Cheese Slices in stock: 89
10:00 --- 72 customers arrived (22 were turned away).
11:00 --- 92 customers arrived (42 were turned away).
12:00 --- 84 customers arrived (34 were turned away).
13:00 --- 52 customers arrived (2 were turned away).
14:00 --- 79 customers arrived (29 were turned away).
15:00 --- 68 customers arrived (18 were turned away).
16:00 --- 77 customers arrived (27 were turned away).
17:00 --- 40 customers arrived.
18:00 --- 44 customers arrived.
19:00 --- 7 customers arrived.

---End of day inventory count---
Customers lost today: 615
Food expired today:
      Buns: 0
      Patties: 21
      Lettuce: 0
      Tomatoes: 0
      Onions: 0
      Cheese Slices: 0
Orders served today:
      #1 was ordered 0 time(s).
      #2 was ordered 0 time(s).
      #3 was ordered 0 time(s).
      #4 was ordered 0 time(s).
      #5 was ordered 0 time(s).
      #6 was ordered 0 time(s).
Successful customer order log:
{}
--------------------------------


========================================
=== December 06 Log: ===================
========================================

      Buns in stock: 95
      Patties in stock: 41
      Lettuce in stock: 0
      Tomatoes in stock: 45
      Onions in stock: 149
      Cheese Slices in stock: 89
10:00 --- 97 customers arrived (47 were turned away).
```

```
219 11:00 --- 71 customers arrived (21 were turned away).
220 12:00 --- 59 customers arrived (9 were turned away).
221 13:00 --- 19 customers arrived.
222 14:00 --- 11 customers arrived.
223 15:00 --- 64 customers arrived (14 were turned away).
224 16:00 --- 35 customers arrived.
225 17:00 --- 42 customers arrived.
226 18:00 --- 65 customers arrived (15 were turned away).
227 19:00 --- 39 customers arrived.
228
229 ---End of day inventory count---
230 Customers lost today: 502
231 Food expired today:
232     Buns: 59
233     Patties: 0
234     Lettuce: 0
235     Tomatoes: 0
236     Onions: 92
237     Cheese Slices: 89
238 Orders served today:
239     #1 was ordered 0 time(s).
240     #2 was ordered 0 time(s).
241     #3 was ordered 0 time(s).
242     #4 was ordered 0 time(s).
243     #5 was ordered 0 time(s).
244     #6 was ordered 0 time(s).
245 Successful customer order log:
246 {}
247 ------------------------------
248
249 =======================================
250 === December 07 Log: ====================
251 =======================================
252
253 A new shipment arrived!
254     Buns in stock: 208
255     Patties in stock: 206
256     Lettuce in stock: 158
257     Tomatoes in stock: 192
258     Onions in stock: 204
259     Cheese Slices in stock: 168
260 10:00 --- 81 customers arrived (31 were turned away).
261 11:00 --- 75 customers arrived (25 were turned away).
262 12:00 --- 49 customers arrived.
263 13:00 --- 39 customers arrived.
264 14:00 --- 2 customers arrived.
265 15:00 --- 26 customers arrived.
266 16:00 --- 7 customers arrived.
267 17:00 --- 40 customers arrived.
268 18:00 --- 84 customers arrived (34 were turned away).
269 19:00 --- 67 customers arrived (17 were turned away).
270
271 ---End of day inventory count---
272 Customers lost today: 335
273 Food expired today:
274     Buns: 0
275     Patties: 0
276     Lettuce: 0
277     Tomatoes: 45
```

```
278      Onions: 0
279      Cheese Slices: 0
280 Orders served today:
281      #1 was ordered 21 time(s).
282      #2 was ordered 25 time(s).
283      #3 was ordered 23 time(s).
284      #4 was ordered 20 time(s).
285      #5 was ordered 20 time(s).
286      #6 was ordered 26 time(s).
287 Successful customer order log:
288 {Customer 1: 1, Customer 2: 3, Customer 3: 4, Customer 4: 2, Customer 5: 4,
        Customer 6: 6, Customer 7: 4, Customer 8: 2, Customer 9: 6, Customer 10: 2,
        Customer 11: 6, Customer 12: 2, Customer 13: 6, Customer 14: 6, Customer 15: 2,
         Customer 16: 1, Customer 17: 4, Customer 18: 3, Customer 19: 4, Customer 20:
        6, Customer 21: 3, Customer 22: 1, Customer 23: 6, Customer 24: 5, Customer 25:
         6, Customer 26: 6, Customer 27: 3, Customer 28: 3, Customer 29: 1, Customer
        30: 5, Customer 31: 1, Customer 32: 1, Customer 33: 5, Customer 34: 2, Customer
         35: 6, Customer 36: 5, Customer 37: 2, Customer 38: 5, Customer 39: 4,
        Customer 40: 6, Customer 41: 4, Customer 42: 3, Customer 43: 5, Customer 44: 1,
         Customer 45: 6, Customer 46: 6, Customer 47: 4, Customer 48: 2, Customer 49:
        5, Customer 50: 5, Customer 82: 5, Customer 83: 5, Customer 84: 3, Customer 85:
         6, Customer 86: 3, Customer 87: 1, Customer 88: 2, Customer 89: 2, Customer
        90: 3, Customer 91: 2, Customer 92: 1, Customer 93: 4, Customer 94: 3, Customer
         95: 1, Customer 96: 1, Customer 97: 1, Customer 98: 6, Customer 99: 4,
        Customer 100: 6, Customer 101: 1, Customer 102: 2, Customer 103: 4, Customer
        104: 1, Customer 105: 1, Customer 106: 3, Customer 107: 2, Customer 108: 6,
        Customer 109: 5, Customer 110: 2, Customer 111: 4, Customer 112: 3, Customer
        113: 3, Customer 114: 2, Customer 115: 5, Customer 116: 4, Customer 117: 2,
        Customer 118: 6, Customer 119: 2, Customer 120: 4, Customer 121: 4, Customer
        122: 3, Customer 123: 6, Customer 124: 4, Customer 125: 6, Customer 126: 5,
        Customer 127: 3, Customer 128: 5, Customer 129: 3, Customer 130: 2, Customer
        131: 6, Customer 157: 2, Customer 158: 6, Customer 159: 1, Customer 160: 5,
        Customer 161: 3, Customer 162: 5, Customer 163: 2, Customer 164: 1, Customer
        165: 1, Customer 166: 2, Customer 167: 5, Customer 168: 6, Customer 169: 6,
        Customer 170: 6, Customer 171: 2, Customer 172: 5, Customer 173: 3, Customer
        174: 4, Customer 175: 1, Customer 176: 5, Customer 177: 3, Customer 178: 4,
        Customer 179: 3, Customer 180: 2, Customer 181: 6, Customer 182: 1, Customer
        183: 3, Customer 184: 3, Customer 185: 2, Customer 186: 3, Customer 187: 4,
        Customer 188: 2, Customer 189: 5, Customer 190: 4, Customer 191: 1}
289 -----------------------------
290
291 ==========================================
292 === December 08 Log: ====================
293 ==========================================
294
295      Buns in stock: 96
296      Patties in stock: 94
297      Lettuce in stock: 0
298      Tomatoes in stock: 38
299      Onions in stock: 109
300      Cheese Slices in stock: 123
301 10:00 --- 29 customers arrived.
302 11:00 --- 49 customers arrived.
303 12:00 --- 79 customers arrived (29 were turned away).
304 13:00 --- 32 customers arrived.
305 14:00 --- 29 customers arrived.
306 15:00 --- 14 customers arrived.
307 16:00 --- 28 customers arrived.
308 17:00 --- 47 customers arrived.
```

```
309  18:00 --- 33 customers arrived.
310  19:00 --- 68 customers arrived (18 were turned away).
311
312  ---End of day inventory count---
313  Customers lost today: 408
314  Food expired today:
315      Buns: 0
316      Patties: 41
317      Lettuce: 0
318      Tomatoes: 0
319      Onions: 0
320      Cheese Slices: 0
321  Orders served today:
322      #1 was ordered 0 time(s).
323      #2 was ordered 0 time(s).
324      #3 was ordered 0 time(s).
325      #4 was ordered 0 time(s).
326      #5 was ordered 0 time(s).
327      #6 was ordered 0 time(s).
328  Successful customer order log:
329  {}
330  ------------------------------
331
332  =======================================
333  === December 09 Log: ==================
334  =======================================
335
336      Buns in stock: 96
337      Patties in stock: 53
338      Lettuce in stock: 0
339      Tomatoes in stock: 38
340      Onions in stock: 109
341      Cheese Slices in stock: 123
342  10:00 --- 1 customers arrived.
343  11:00 --- 43 customers arrived.
344  12:00 --- 85 customers arrived (35 were turned away).
345  13:00 --- 38 customers arrived.
346  14:00 --- 4 customers arrived.
347  15:00 --- 95 customers arrived (45 were turned away).
348  16:00 --- 67 customers arrived (17 were turned away).
349  17:00 --- 91 customers arrived (41 were turned away).
350  18:00 --- 45 customers arrived.
351  19:00 --- 29 customers arrived.
352
353  ---End of day inventory count---
354  Customers lost today: 498
355  Food expired today:
356      Buns: 36
357      Patties: 0
358      Lettuce: 0
359      Tomatoes: 0
360      Onions: 57
361      Cheese Slices: 123
362  Orders served today:
363      #1 was ordered 0 time(s).
364      #2 was ordered 0 time(s).
365      #3 was ordered 0 time(s).
366      #4 was ordered 0 time(s).
367      #5 was ordered 0 time(s).
```

```
368     #6 was ordered 0 time(s).
369 Successful customer order log:
370 {}
371 -------------------------------
372
373 ==========================================
374 === December 10 Log: ====================
375 ==========================================
376
377 A new shipment arrived!
378     Buns in stock: 204
379     Patties in stock: 185
380     Lettuce in stock: 174
381     Tomatoes in stock: 180
382     Onions in stock: 206
383     Cheese Slices in stock: 126
384 10:00 --- 69 customers arrived (19 were turned away).
385 11:00 --- 79 customers arrived (29 were turned away).
386 12:00 --- 30 customers arrived.
387 13:00 --- 75 customers arrived (25 were turned away).
388 14:00 --- 5 customers arrived.
389 15:00 --- 43 customers arrived.
390 16:00 --- 6 customers arrived.
391 17:00 --- 48 customers arrived.
392 18:00 --- 70 customers arrived (20 were turned away).
393 19:00 --- 82 customers arrived (32 were turned away).
394
395 ---End of day inventory count---
396 Customers lost today: 353
397 Food expired today:
398     Buns: 0
399     Patties: 0
400     Lettuce: 0
401     Tomatoes: 38
402     Onions: 0
403     Cheese Slices: 0
404 Orders served today:
405     #1 was ordered 30 time(s).
406     #2 was ordered 26 time(s).
407     #3 was ordered 20 time(s).
408     #4 was ordered 28 time(s).
409     #5 was ordered 27 time(s).
410     #6 was ordered 23 time(s).
411 Successful customer order log:
412 {Customer 1: 1, Customer 2: 5, Customer 3: 3, Customer 4: 3, Customer 5: 1,
      Customer 6: 2, Customer 7: 3, Customer 8: 4, Customer 9: 2, Customer 10: 6,
      Customer 11: 5, Customer 12: 1, Customer 13: 5, Customer 14: 4, Customer 15: 4,
       Customer 16: 1, Customer 17: 6, Customer 18: 4, Customer 19: 5, Customer 20:
      4, Customer 21: 3, Customer 22: 4, Customer 23: 4, Customer 24: 6, Customer 25:
       2, Customer 26: 5, Customer 27: 1, Customer 28: 6, Customer 29: 4, Customer
      30: 2, Customer 31: 4, Customer 32: 3, Customer 33: 4, Customer 34: 4, Customer
       35: 2, Customer 36: 1, Customer 37: 6, Customer 38: 6, Customer 39: 5,
      Customer 40: 2, Customer 41: 6, Customer 42: 1, Customer 43: 5, Customer 44: 6,
       Customer 45: 6, Customer 46: 5, Customer 47: 2, Customer 48: 4, Customer 49:
      2, Customer 50: 4, Customer 70: 1, Customer 71: 1, Customer 72: 4, Customer 73:
       1, Customer 74: 4, Customer 75: 4, Customer 76: 6, Customer 77: 6, Customer
      78: 6, Customer 79: 3, Customer 80: 1, Customer 81: 3, Customer 82: 1, Customer
       83: 1, Customer 84: 5, Customer 85: 6, Customer 86: 1, Customer 87: 6,
      Customer 88: 3, Customer 89: 2, Customer 90: 3, Customer 91: 6, Customer 92: 2,
```

Customer 93: 5, Customer 94: 1, Customer 95: 3, Customer 96: 4, Customer 97:
        6, Customer 98: 2, Customer 99: 3, Customer 100: 1, Customer 101: 2, Customer
        102: 3, Customer 103: 5, Customer 104: 2, Customer 105: 2, Customer 106: 4,
        Customer 107: 6, Customer 108: 5, Customer 109: 1, Customer 110: 5, Customer
        111: 5, Customer 112: 4, Customer 113: 3, Customer 114: 4, Customer 115: 5,
        Customer 116: 6, Customer 117: 5, Customer 118: 3, Customer 119: 1, Customer
        149: 1, Customer 150: 3, Customer 151: 3, Customer 152: 1, Customer 153: 4,
        Customer 154: 4, Customer 155: 2, Customer 156: 6, Customer 157: 3, Customer
        158: 2, Customer 159: 4, Customer 160: 4, Customer 161: 2, Customer 162: 5,
        Customer 163: 1, Customer 164: 5, Customer 165: 1, Customer 166: 1, Customer
        167: 2, Customer 168: 5, Customer 169: 2, Customer 170: 3, Customer 171: 5,
        Customer 172: 1, Customer 173: 6, Customer 174: 5, Customer 175: 1, Customer
        176: 2, Customer 177: 2, Customer 178: 5, Customer 179: 1, Customer 180: 2,
        Customer 181: 6, Customer 182: 4, Customer 183: 5, Customer 184: 5, Customer
        185: 6, Customer 186: 3, Customer 187: 3, Customer 188: 5, Customer 189: 5,
        Customer 190: 2, Customer 191: 1, Customer 192: 2, Customer 193: 4, Customer
        194: 4, Customer 195: 2, Customer 196: 1, Customer 197: 5, Customer 198: 1,
        Customer 199: 6, Customer 200: 4, Customer 201: 1, Customer 202: 2}
413 ------------------------------
414
415 ==
416 === December 11 Log: ===================
417 ==
418
419   Buns in stock: 70
420   Patties in stock: 51
421   Lettuce in stock: 0
422   Tomatoes in stock: 11
423   Onions in stock: 107
424   Cheese Slices in stock: 73
425 10:00 --- 91 customers arrived (41 were turned away).
426 11:00 --- 15 customers arrived.
427 12:00 --- 14 customers arrived.
428 13:00 --- 94 customers arrived (44 were turned away).
429 14:00 --- 54 customers arrived (4 were turned away).
430 15:00 --- 1 customers arrived.
431 16:00 --- 6 customers arrived.
432 17:00 --- 25 customers arrived.
433 18:00 --- 84 customers arrived (34 were turned away).
434 19:00 --- 69 customers arrived (19 were turned away).
435
436 ---End of day inventory count---
437 Customers lost today: 453
438 Food expired today:
439   Buns: 0
440   Patties: 51
441   Lettuce: 0
442   Tomatoes: 0
443   Onions: 0
444   Cheese Slices: 0
445 Orders served today:
446   #1 was ordered 0 time(s).
447   #2 was ordered 0 time(s).
448   #3 was ordered 0 time(s).
449   #4 was ordered 0 time(s).
450   #5 was ordered 0 time(s).
451   #6 was ordered 0 time(s).
452 Successful customer order log:
453 {}

```
454  --------------------------------
455
456  =======================================
457  === December 12 Log: ===================
458  =======================================
459
460      Buns in stock: 70
461      Patties in stock: 0
462      Lettuce in stock: 0
463      Tomatoes in stock: 11
464      Onions in stock: 107
465      Cheese Slices in stock: 73
466  10:00 --- 95 customers arrived (45 were turned away).
467  11:00 --- 86 customers arrived (36 were turned away).
468  12:00 --- 82 customers arrived (32 were turned away).
469  13:00 --- 85 customers arrived (35 were turned away).
470  14:00 --- 59 customers arrived (9 were turned away).
471  15:00 --- 26 customers arrived.
472  16:00 --- 29 customers arrived.
473  17:00 --- 75 customers arrived (25 were turned away).
474  18:00 --- 66 customers arrived (16 were turned away).
475  19:00 --- 84 customers arrived (34 were turned away).
476
477  ---End of day inventory count---
478  Customers lost today: 687
479  Food expired today:
480      Buns: 60
481      Patties: 0
482      Lettuce: 0
483      Tomatoes: 0
484      Onions: 52
485      Cheese Slices: 73
486  Orders served today:
487      #1 was ordered 0 time(s).
488      #2 was ordered 0 time(s).
489      #3 was ordered 0 time(s).
490      #4 was ordered 0 time(s).
491      #5 was ordered 0 time(s).
492      #6 was ordered 0 time(s).
493  Successful customer order log:
494  {}
495  --------------------------------
496
497  =======================================
498  === December 13 Log: ===================
499  =======================================
500
501      Buns in stock: 10
502      Patties in stock: 0
503      Lettuce in stock: 0
504      Tomatoes in stock: 11
505      Onions in stock: 55
506      Cheese Slices in stock: 0
507  10:00 --- 93 customers arrived (43 were turned away).
508  11:00 --- 67 customers arrived (17 were turned away).
509  12:00 --- 28 customers arrived.
510  13:00 --- 13 customers arrived.
511  14:00 --- 44 customers arrived.
512  15:00 --- 58 customers arrived (8 were turned away).
```

```
513  16:00 --- 66 customers arrived (16 were turned away).
514  17:00 --- 86 customers arrived (36 were turned away).
515  18:00 --- 35 customers arrived.
516  19:00 --- 72 customers arrived (22 were turned away).
517
518  ---End of day inventory count---
519  Customers lost today: 562
520  Food expired today:
521      Buns: 0
522      Patties: 0
523      Lettuce: 0
524      Tomatoes: 11
525      Onions: 0
526      Cheese Slices: 0
527  Orders served today:
528      #1 was ordered 0 time(s).
529      #2 was ordered 0 time(s).
530      #3 was ordered 0 time(s).
531      #4 was ordered 0 time(s).
532      #5 was ordered 0 time(s).
533      #6 was ordered 0 time(s).
534  Successful customer order log:
535  {}
536  ------------------------------
537
538  =======================================
539  === December 14 Log: ==================
540  =======================================
541
542      Buns in stock: 10
543      Patties in stock: 0
544      Lettuce in stock: 0
545      Tomatoes in stock: 0
546      Onions in stock: 55
547      Cheese Slices in stock: 0
548  10:00 --- 52 customers arrived (2 were turned away).
549  11:00 --- 64 customers arrived (14 were turned away).
550  12:00 --- 27 customers arrived.
551  13:00 --- 29 customers arrived.
552  14:00 --- 5 customers arrived.
553  15:00 --- 93 customers arrived (43 were turned away).
554  16:00 --- 24 customers arrived.
555  17:00 --- 35 customers arrived.
556  18:00 --- 56 customers arrived (6 were turned away).
557  19:00 --- 52 customers arrived (2 were turned away).
558
559  ---End of day inventory count---
560  Customers lost today: 437
561  Food expired today:
562      Buns: 0
563      Patties: 0
564      Lettuce: 0
565      Tomatoes: 0
566      Onions: 0
567      Cheese Slices: 0
568  Orders served today:
569      #1 was ordered 0 time(s).
570      #2 was ordered 0 time(s).
571      #3 was ordered 0 time(s).
```

```
572     #4 was ordered 0 time(s).
573     #5 was ordered 0 time(s).
574     #6 was ordered 0 time(s).
575 Successful customer order log:
576 {}
577 --------------------------------
578
579 =========================================
580 === December 15 Log: ====================
581 =========================================
582
583 A new shipment arrived!
584     Buns in stock: 163
585     Patties in stock: 159
586     Lettuce in stock: 155
587     Tomatoes in stock: 147
588     Onions in stock: 226
589     Cheese Slices in stock: 158
590 10:00 --- 36 customers arrived.
591 11:00 --- 76 customers arrived (26 were turned away).
592 12:00 --- 39 customers arrived.
593 13:00 --- 46 customers arrived.
594 14:00 --- 59 customers arrived (9 were turned away).
595 15:00 --- 60 customers arrived (10 were turned away).
596 16:00 --- 65 customers arrived (15 were turned away).
597 17:00 --- 21 customers arrived.
598 18:00 --- 75 customers arrived (25 were turned away).
599 19:00 --- 46 customers arrived.
600
601 ---End of day inventory count---
602 Customers lost today: 393
603 Food expired today:
604     Buns: 10
605     Patties: 0
606     Lettuce: 0
607     Tomatoes: 0
608     Onions: 55
609     Cheese Slices: 0
610 Orders served today:
611     #1 was ordered 28 time(s).
612     #2 was ordered 20 time(s).
613     #3 was ordered 25 time(s).
614     #4 was ordered 13 time(s).
615     #5 was ordered 24 time(s).
616     #6 was ordered 20 time(s).
617 Successful customer order log:
618 {Customer 1: 5, Customer 2: 6, Customer 3: 5, Customer 4: 6, Customer 5: 4,
        Customer 6: 6, Customer 7: 3, Customer 8: 5, Customer 9: 6, Customer 10: 1,
        Customer 11: 1, Customer 12: 5, Customer 13: 1, Customer 14: 4, Customer 15: 1,
         Customer 16: 5, Customer 17: 3, Customer 18: 6, Customer 19: 4, Customer 20:
        5, Customer 21: 5, Customer 22: 1, Customer 23: 6, Customer 24: 2, Customer 25:
         1, Customer 26: 4, Customer 27: 2, Customer 28: 4, Customer 29: 5, Customer
        30: 4, Customer 31: 3, Customer 32: 5, Customer 33: 2, Customer 34: 2, Customer
         35: 5, Customer 36: 6, Customer 37: 6, Customer 38: 6, Customer 39: 2,
        Customer 40: 2, Customer 41: 3, Customer 42: 1, Customer 43: 3, Customer 44: 6,
         Customer 45: 1, Customer 46: 3, Customer 47: 2, Customer 48: 1, Customer 49:
        3, Customer 50: 5, Customer 51: 5, Customer 52: 3, Customer 53: 4, Customer 54:
         3, Customer 55: 1, Customer 56: 4, Customer 57: 3, Customer 58: 2, Customer
        59: 1, Customer 60: 3, Customer 61: 5, Customer 62: 2, Customer 63: 2, Customer
```

```
        64: 6, Customer 65: 5, Customer 66: 1, Customer 67: 2, Customer 68: 6,
        Customer 69: 4, Customer 70: 1, Customer 71: 1, Customer 72: 5, Customer 73: 6,
         Customer 74: 1, Customer 75: 1, Customer 76: 6, Customer 77: 3, Customer 78:
        1, Customer 79: 1, Customer 80: 3, Customer 81: 5, Customer 82: 3, Customer 83:
         6, Customer 84: 4, Customer 85: 5, Customer 86: 3, Customer 113: 4, Customer
        114: 2, Customer 115: 6, Customer 116: 2, Customer 117: 1, Customer 118: 5,
        Customer 119: 2, Customer 120: 6, Customer 121: 2, Customer 122: 3, Customer
        123: 1, Customer 124: 5, Customer 125: 6, Customer 126: 6, Customer 127: 3,
        Customer 128: 1, Customer 129: 3, Customer 130: 3, Customer 131: 3, Customer
        132: 4, Customer 133: 5, Customer 134: 5, Customer 135: 1, Customer 136: 2,
        Customer 137: 1, Customer 138: 2, Customer 139: 6, Customer 140: 2, Customer
        141: 1, Customer 142: 1, Customer 143: 3, Customer 144: 4, Customer 145: 3,
        Customer 146: 1, Customer 147: 2, Customer 148: 5, Customer 149: 3, Customer
        150: 3, Customer 151: 5, Customer 152: 1, Customer 153: 3, Customer 154: 1,
        Customer 155: 2, Customer 156: 5}
619 ------------------------------
620
621 ========================================
622 === December 16 Log: ====================
623 ========================================
624
625     Buns in stock: 48
626     Patties in stock: 54
627     Lettuce in stock: 0
628     Tomatoes in stock: 37
629     Onions in stock: 78
630     Cheese Slices in stock: 114
631 10:00 --- 39 customers arrived.
632 11:00 --- 48 customers arrived.
633 12:00 --- 54 customers arrived (4 were turned away).
634 13:00 --- 51 customers arrived (1 were turned away).
635 14:00 --- 68 customers arrived (18 were turned away).
636 15:00 --- 8 customers arrived.
637 16:00 --- 38 customers arrived.
638 17:00 --- 68 customers arrived (18 were turned away).
639 18:00 --- 83 customers arrived (33 were turned away).
640 19:00 --- 53 customers arrived (3 were turned away).
641
642 ---End of day inventory count---
643 Customers lost today: 510
644 Food expired today:
645     Buns: 0
646     Patties: 0
647     Lettuce: 0
648     Tomatoes: 0
649     Onions: 0
650     Cheese Slices: 0
651 Orders served today:
652     #1 was ordered 0 time(s).
653     #2 was ordered 0 time(s).
654     #3 was ordered 0 time(s).
655     #4 was ordered 0 time(s).
656     #5 was ordered 0 time(s).
657     #6 was ordered 0 time(s).
658 Successful customer order log:
659 {}
660 ------------------------------
661
662 ========================================
```

```
663  === December 17 Log: ====================
664  ===========================================
665
666      Buns in stock: 48
667      Patties in stock: 54
668      Lettuce in stock: 0
669      Tomatoes in stock: 37
670      Onions in stock: 78
671      Cheese Slices in stock: 114
672  10:00 --- 59 customers arrived (9 were turned away).
673  11:00 --- 92 customers arrived (42 were turned away).
674  12:00 --- 19 customers arrived.
675  13:00 --- 56 customers arrived (6 were turned away).
676  14:00 --- 77 customers arrived (27 were turned away).
677  15:00 --- 72 customers arrived (22 were turned away).
678  16:00 --- 76 customers arrived (26 were turned away).
679  17:00 --- 38 customers arrived.
680  18:00 --- 35 customers arrived.
681  19:00 --- 97 customers arrived (47 were turned away).
682
683  ---End of day inventory count---
684  Customers lost today: 621
685  Food expired today:
686      Buns: 0
687      Patties: 0
688      Lettuce: 0
689      Tomatoes: 0
690      Onions: 0
691      Cheese Slices: 114
692  Orders served today:
693      #1 was ordered 0 time(s).
694      #2 was ordered 0 time(s).
695      #3 was ordered 0 time(s).
696      #4 was ordered 0 time(s).
697      #5 was ordered 0 time(s).
698      #6 was ordered 0 time(s).
699  Successful customer order log:
700  {}
701  ------------------------------
702
703  ===========================================
704  === December 18 Log: ===================
705  ===========================================
706
707  A new shipment arrived!
708      Buns in stock: 176
709      Patties in stock: 187
710      Lettuce in stock: 120
711      Tomatoes in stock: 160
712      Onions in stock: 187
713      Cheese Slices in stock: 119
714  10:00 --- 44 customers arrived.
715  11:00 --- 85 customers arrived (35 were turned away).
716  12:00 --- 87 customers arrived (37 were turned away).
717  13:00 --- 65 customers arrived (15 were turned away).
718  14:00 --- 75 customers arrived (25 were turned away).
719  15:00 --- 97 customers arrived (47 were turned away).
720  16:00 --- 51 customers arrived (1 were turned away).
721  17:00 --- 13 customers arrived.
```

722 18:00 --- 48 customers arrived.
723 19:00 --- 89 customers arrived (39 were turned away).
724
725 ---End of day inventory count---
726 Customers lost today: 546
727 Food expired today:
728   Buns: 0
729   Patties: 0
730   Lettuce: 0
731   Tomatoes: 37
732   Onions: 0
733   Cheese Slices: 0
734 Orders served today:
735   #1 was ordered 19 time(s).
736   #2 was ordered 14 time(s).
737   #3 was ordered 12 time(s).
738   #4 was ordered 22 time(s).
739   #5 was ordered 20 time(s).
740   #6 was ordered 21 time(s).
741 Successful customer order log:
742 {Customer 1: 1, Customer 2: 5, Customer 3: 1, Customer 4: 2, Customer 5: 1,
     Customer 6: 5, Customer 7: 3, Customer 8: 3, Customer 9: 4, Customer 10: 1,
     Customer 11: 4, Customer 12: 5, Customer 13: 4, Customer 14: 4, Customer 15: 1,
      Customer 16: 3, Customer 17: 2, Customer 18: 2, Customer 19: 1, Customer 20:
     4, Customer 21: 6, Customer 22: 5, Customer 23: 5, Customer 24: 2, Customer 25:
      5, Customer 26: 2, Customer 27: 3, Customer 28: 3, Customer 29: 1, Customer
     30: 2, Customer 31: 5, Customer 32: 2, Customer 33: 4, Customer 34: 6, Customer
      35: 5, Customer 36: 6, Customer 37: 1, Customer 38: 1, Customer 39: 5,
     Customer 40: 4, Customer 41: 4, Customer 42: 6, Customer 43: 5, Customer 44: 1,
      Customer 45: 4, Customer 46: 4, Customer 47: 6, Customer 48: 4, Customer 49:
     4, Customer 50: 2, Customer 51: 5, Customer 52: 1, Customer 53: 2, Customer 54:
      5, Customer 55: 4, Customer 56: 6, Customer 57: 5, Customer 58: 3, Customer
     59: 1, Customer 60: 5, Customer 61: 6, Customer 62: 5, Customer 63: 4, Customer
      64: 6, Customer 65: 6, Customer 66: 6, Customer 67: 4, Customer 68: 6,
     Customer 69: 5, Customer 70: 4, Customer 71: 6, Customer 72: 2, Customer 73: 6,
      Customer 74: 3, Customer 75: 1, Customer 76: 1, Customer 77: 6, Customer 78:
     5, Customer 79: 4, Customer 80: 1, Customer 81: 6, Customer 82: 6, Customer 83:
      3, Customer 84: 2, Customer 85: 3, Customer 86: 4, Customer 87: 2, Customer
     88: 6, Customer 89: 6, Customer 90: 5, Customer 91: 4, Customer 92: 3, Customer
      93: 4, Customer 94: 6, Customer 130: 6, Customer 131: 1, Customer 132: 2,
     Customer 133: 4, Customer 134: 4, Customer 135: 5, Customer 136: 1, Customer
     137: 5, Customer 138: 3, Customer 139: 1, Customer 140: 2, Customer 141: 6,
     Customer 142: 3, Customer 143: 1}
743 ------------------------------
744
745 ==
746 === December 19 Log: ====================
747 ==
748
749   Buns in stock: 80
750   Patties in stock: 91
751   Lettuce in stock: 0
752   Tomatoes in stock: 36
753   Onions in stock: 121
754   Cheese Slices in stock: 85
755 10:00 --- 84 customers arrived (34 were turned away).
756 11:00 --- 98 customers arrived (48 were turned away).
757 12:00 --- 23 customers arrived.
758 13:00 --- 55 customers arrived (5 were turned away).

```
759  14:00 --- 11 customers arrived.
760  15:00 --- 85 customers arrived (35 were turned away).
761  16:00 --- 58 customers arrived (8 were turned away).
762  17:00 --- 52 customers arrived (2 were turned away).
763  18:00 --- 11 customers arrived.
764  19:00 --- 92 customers arrived (42 were turned away).
765
766  ---End of day inventory count---
767  Customers lost today: 569
768  Food expired today:
769      Buns: 0
770      Patties: 54
771      Lettuce: 0
772      Tomatoes: 0
773      Onions: 0
774      Cheese Slices: 0
775  Orders served today:
776      #1 was ordered 0 time(s).
777      #2 was ordered 0 time(s).
778      #3 was ordered 0 time(s).
779      #4 was ordered 0 time(s).
780      #5 was ordered 0 time(s).
781      #6 was ordered 0 time(s).
782  Successful customer order log:
783  {}
784  ------------------------------
785
786  ========================================
787  === December 20 Log: ===================
788  ========================================
789
790      Buns in stock: 80
791      Patties in stock: 37
792      Lettuce in stock: 0
793      Tomatoes in stock: 36
794      Onions in stock: 121
795      Cheese Slices in stock: 85
796  10:00 --- 9 customers arrived.
797  11:00 --- 52 customers arrived (2 were turned away).
798  12:00 --- 52 customers arrived (2 were turned away).
799  13:00 --- 83 customers arrived (33 were turned away).
800  14:00 --- 34 customers arrived.
801  15:00 --- 18 customers arrived.
802  16:00 --- 34 customers arrived.
803  17:00 --- 83 customers arrived (33 were turned away).
804  18:00 --- 39 customers arrived.
805  19:00 --- 58 customers arrived (8 were turned away).
806
807  ---End of day inventory count---
808  Customers lost today: 462
809  Food expired today:
810      Buns: 48
811      Patties: 0
812      Lettuce: 0
813      Tomatoes: 0
814      Onions: 78
815      Cheese Slices: 85
816  Orders served today:
817      #1 was ordered 0 time(s).
```

```
    #2 was ordered 0 time(s).
    #3 was ordered 0 time(s).
    #4 was ordered 0 time(s).
    #5 was ordered 0 time(s).
    #6 was ordered 0 time(s).
Successful customer order log:
{}
------------------------------

========================================
=== December 21 Log: ===================
========================================

A new shipment arrived!
    Buns in stock: 171
    Patties in stock: 202
    Lettuce in stock: 146
    Tomatoes in stock: 197
    Onions in stock: 182
    Cheese Slices in stock: 120
10:00 --- 20 customers arrived.
11:00 --- 39 customers arrived.
12:00 --- 36 customers arrived.
13:00 --- 73 customers arrived (23 were turned away).
14:00 --- 13 customers arrived.
15:00 --- 1 customers arrived.
16:00 --- 12 customers arrived.
17:00 --- 9 customers arrived.
18:00 --- 15 customers arrived.
19:00 --- 37 customers arrived.

---End of day inventory count---
Customers lost today: 132
Food expired today:
    Buns: 0
    Patties: 0
    Lettuce: 0
    Tomatoes: 36
    Onions: 0
    Cheese Slices: 0
Orders served today:
    #1 was ordered 23 time(s).
    #2 was ordered 23 time(s).
    #3 was ordered 23 time(s).
    #4 was ordered 24 time(s).
    #5 was ordered 12 time(s).
    #6 was ordered 18 time(s).
Successful customer order log:
{Customer 1: 6, Customer 2: 2, Customer 3: 3, Customer 4: 1, Customer 5: 2,
    Customer 6: 2, Customer 7: 4, Customer 8: 2, Customer 9: 2, Customer 10: 5,
    Customer 11: 1, Customer 12: 2, Customer 13: 6, Customer 14: 3, Customer 15: 2,
     Customer 16: 2, Customer 17: 3, Customer 18: 6, Customer 19: 2, Customer 20:
    6, Customer 21: 4, Customer 22: 1, Customer 23: 2, Customer 24: 1, Customer 25:
     1, Customer 26: 1, Customer 27: 2, Customer 28: 4, Customer 29: 6, Customer
    30: 6, Customer 31: 4, Customer 32: 6, Customer 33: 5, Customer 34: 2, Customer
     35: 6, Customer 36: 3, Customer 37: 5, Customer 38: 4, Customer 39: 2,
    Customer 40: 3, Customer 41: 4, Customer 42: 3, Customer 43: 3, Customer 44: 6,
     Customer 45: 4, Customer 46: 1, Customer 47: 2, Customer 48: 2, Customer 49:
    2, Customer 50: 3, Customer 51: 5, Customer 52: 6, Customer 53: 4, Customer 54:
```

```
          4, Customer 55: 2, Customer 56: 3, Customer 57: 3, Customer 58: 1, Customer
          59: 1, Customer 60: 6, Customer 61: 3, Customer 62: 4, Customer 63: 3, Customer
           64: 5, Customer 65: 4, Customer 66: 4, Customer 67: 4, Customer 68: 4,
          Customer 69: 2, Customer 70: 6, Customer 71: 5, Customer 72: 6, Customer 73: 4,
           Customer 74: 1, Customer 75: 4, Customer 76: 2, Customer 77: 4, Customer 78:
          3, Customer 79: 1, Customer 80: 6, Customer 81: 5, Customer 82: 4, Customer 83:
           1, Customer 84: 1, Customer 85: 4, Customer 86: 1, Customer 87: 5, Customer
          88: 2, Customer 89: 3, Customer 90: 1, Customer 91: 4, Customer 92: 3, Customer
           93: 1, Customer 94: 1, Customer 95: 4, Customer 96: 3, Customer 97: 6,
          Customer 98: 1, Customer 99: 1, Customer 100: 2, Customer 101: 1, Customer 102:
           5, Customer 103: 5, Customer 104: 3, Customer 105: 3, Customer 106: 4,
          Customer 107: 5, Customer 108: 3, Customer 109: 1, Customer 110: 3, Customer
          111: 1, Customer 112: 3, Customer 113: 6, Customer 114: 6, Customer 115: 4,
          Customer 116: 2, Customer 117: 3, Customer 118: 4, Customer 119: 6, Customer
          120: 2, Customer 121: 5, Customer 122: 1, Customer 123: 3}
867 ------------------------------
868
869 ========================================
870 === December 22 Log: ====================
871 ========================================
872
873     Buns in stock: 71
874     Patties in stock: 102
875     Lettuce in stock: 0
876     Tomatoes in stock: 56
877     Onions in stock: 95
878     Cheese Slices in stock: 85
879 10:00 --- 94 customers arrived (44 were turned away).
880 11:00 --- 78 customers arrived (28 were turned away).
881 12:00 --- 16 customers arrived.
882 13:00 --- 60 customers arrived (10 were turned away).
883 14:00 --- 36 customers arrived.
884 15:00 --- 86 customers arrived (36 were turned away).
885 16:00 --- 29 customers arrived.
886 17:00 --- 93 customers arrived (43 were turned away).
887 18:00 --- 51 customers arrived (1 were turned away).
888 19:00 --- 79 customers arrived (29 were turned away).
889
890 ---End of day inventory count---
891 Customers lost today: 622
892 Food expired today:
893     Buns: 0
894     Patties: 37
895     Lettuce: 0
896     Tomatoes: 0
897     Onions: 0
898     Cheese Slices: 0
899 Orders served today:
900     #1 was ordered 0 time(s).
901     #2 was ordered 0 time(s).
902     #3 was ordered 0 time(s).
903     #4 was ordered 0 time(s).
904     #5 was ordered 0 time(s).
905     #6 was ordered 0 time(s).
906 Successful customer order log:
907 {}
908 ------------------------------
909
910 ========================================
```

```
911 === December 23 Log: ====================
912 ==========================================
913
914     Buns in stock: 71
915     Patties in stock: 65
916     Lettuce in stock: 0
917     Tomatoes in stock: 56
918     Onions in stock: 95
919     Cheese Slices in stock: 85
920 10:00 --- 21 customers arrived.
921 11:00 --- 24 customers arrived.
922 12:00 --- 16 customers arrived.
923 13:00 --- 44 customers arrived.
924 14:00 --- 44 customers arrived.
925 15:00 --- 93 customers arrived (43 were turned away).
926 16:00 --- 71 customers arrived (21 were turned away).
927 17:00 --- 56 customers arrived (6 were turned away).
928 18:00 --- 1 customers arrived.
929 19:00 --- 1 customers arrived.
930
931 ---End of day inventory count---
932 Customers lost today: 371
933 Food expired today:
934     Buns: 32
935     Patties: 0
936     Lettuce: 0
937     Tomatoes: 0
938     Onions: 43
939     Cheese Slices: 85
940 Orders served today:
941     #1 was ordered 0 time(s).
942     #2 was ordered 0 time(s).
943     #3 was ordered 0 time(s).
944     #4 was ordered 0 time(s).
945     #5 was ordered 0 time(s).
946     #6 was ordered 0 time(s).
947 Successful customer order log:
948 {}
949 ------------------------------
950
951 ==========================================
952 === December 24 Log: ====================
953 ==========================================
954
955     Buns in stock: 39
956     Patties in stock: 65
957     Lettuce in stock: 0
958     Tomatoes in stock: 56
959     Onions in stock: 52
960     Cheese Slices in stock: 0
961 10:00 --- 49 customers arrived.
962 11:00 --- 83 customers arrived (33 were turned away).
963 12:00 --- 9 customers arrived.
964 13:00 --- 76 customers arrived (26 were turned away).
965 14:00 --- 67 customers arrived (17 were turned away).
966 15:00 --- 61 customers arrived (11 were turned away).
967 16:00 --- 4 customers arrived.
968 17:00 --- 55 customers arrived (5 were turned away).
969 18:00 --- 45 customers arrived.
```

```
970  19:00 --- 2 customers arrived.

972  ---End of day inventory count---
973  Customers lost today: 451
974  Food expired today:
975      Buns: 0
976      Patties: 0
977      Lettuce: 0
978      Tomatoes: 56
979      Onions: 0
980      Cheese Slices: 0
981  Orders served today:
982      #1 was ordered 0 time(s).
983      #2 was ordered 0 time(s).
984      #3 was ordered 0 time(s).
985      #4 was ordered 0 time(s).
986      #5 was ordered 0 time(s).
987      #6 was ordered 0 time(s).
988  Successful customer order log:
989  {}
990  -------------------------------

992  ========================================
993  === December 25 Log: ===================
994  ========================================

996  A new shipment arrived!
997      Buns in stock: 179
998      Patties in stock: 193
999      Lettuce in stock: 120
1000     Tomatoes in stock: 104
1001     Onions in stock: 193
1002     Cheese Slices in stock: 106
1003 10:00 --- 67 customers arrived (17 were turned away).
1004 11:00 --- 59 customers arrived (9 were turned away).
1005 12:00 --- 34 customers arrived.
1006 13:00 --- 97 customers arrived (47 were turned away).
1007 14:00 --- 78 customers arrived (28 were turned away).
1008 15:00 --- 75 customers arrived (25 were turned away).
1009 16:00 --- 3 customers arrived.
1010 17:00 --- 34 customers arrived.
1011 18:00 --- 29 customers arrived.
1012 19:00 --- 81 customers arrived (31 were turned away).

1014 ---End of day inventory count---
1015 Customers lost today: 450
1016 Food expired today:
1017     Buns: 0
1018     Patties: 65
1019     Lettuce: 0
1020     Tomatoes: 0
1021     Onions: 0
1022     Cheese Slices: 0
1023 Orders served today:
1024     #1 was ordered 25 time(s).
1025     #2 was ordered 16 time(s).
1026     #3 was ordered 13 time(s).
1027     #4 was ordered 20 time(s).
1028     #5 was ordered 15 time(s).
```

```
1029      #6 was ordered 18 time(s).
1030 Successful customer order log:
1031 {Customer 1: 5, Customer 2: 4, Customer 3: 2, Customer 4: 6, Customer 5: 4,
        Customer 6: 6, Customer 7: 3, Customer 8: 3, Customer 9: 4, Customer 10: 2,
        Customer 11: 1, Customer 12: 5, Customer 13: 4, Customer 14: 2, Customer 15: 2,
         Customer 16: 4, Customer 17: 3, Customer 18: 6, Customer 19: 4, Customer 20:
        3, Customer 21: 5, Customer 22: 4, Customer 23: 1, Customer 24: 3, Customer 25:
         1, Customer 26: 3, Customer 27: 3, Customer 28: 6, Customer 29: 6, Customer
        30: 5, Customer 31: 4, Customer 32: 2, Customer 33: 3, Customer 34: 1, Customer
         35: 4, Customer 36: 3, Customer 37: 6, Customer 38: 4, Customer 39: 1,
        Customer 40: 1, Customer 41: 1, Customer 42: 4, Customer 43: 6, Customer 44: 2,
         Customer 45: 1, Customer 46: 1, Customer 47: 6, Customer 48: 6, Customer 49:
        5, Customer 50: 5, Customer 68: 5, Customer 69: 5, Customer 70: 1, Customer 71:
         4, Customer 72: 5, Customer 73: 5, Customer 74: 2, Customer 75: 2, Customer
        76: 6, Customer 77: 5, Customer 78: 1, Customer 79: 1, Customer 80: 1, Customer
         81: 2, Customer 82: 3, Customer 83: 1, Customer 84: 5, Customer 85: 4,
        Customer 86: 2, Customer 87: 4, Customer 88: 1, Customer 89: 6, Customer 90: 1,
         Customer 91: 5, Customer 92: 6, Customer 93: 2, Customer 94: 6, Customer 95:
        2, Customer 96: 6, Customer 97: 4, Customer 98: 2, Customer 99: 2, Customer
        100: 4, Customer 101: 4, Customer 102: 1, Customer 103: 4, Customer 104: 6,
        Customer 105: 1, Customer 106: 1, Customer 107: 1, Customer 108: 6, Customer
        109: 3, Customer 110: 1, Customer 111: 2, Customer 112: 1, Customer 113: 1,
        Customer 114: 1, Customer 115: 2, Customer 116: 6, Customer 117: 5, Customer
        127: 5, Customer 128: 6, Customer 129: 4, Customer 130: 3, Customer 131: 3,
        Customer 132: 4, Customer 133: 1}
1032 -----------------------------
1033
1034 =========================================
1035 === December 26 Log: ====================
1036 =========================================
1037
1038      Buns in stock: 85
1039      Patties in stock: 34
1040      Lettuce in stock: 0
1041      Tomatoes in stock: 15
1042      Onions in stock: 121
1043      Cheese Slices in stock: 75
1044 10:00 --- 50 customers arrived.
1045 11:00 --- 81 customers arrived (31 were turned away).
1046 12:00 --- 46 customers arrived.
1047 13:00 --- 83 customers arrived (33 were turned away).
1048 14:00 --- 30 customers arrived.
1049 15:00 --- 94 customers arrived (44 were turned away).
1050 16:00 --- 24 customers arrived.
1051 17:00 --- 41 customers arrived.
1052 18:00 --- 24 customers arrived.
1053 19:00 --- 5 customers arrived.
1054
1055 ---End of day inventory count---
1056 Customers lost today: 478
1057 Food expired today:
1058      Buns: 39
1059      Patties: 0
1060      Lettuce: 0
1061      Tomatoes: 0
1062      Onions: 52
1063      Cheese Slices: 0
1064 Orders served today:
1065      #1 was ordered 0 time(s).
```

```
1066        #2 was ordered 0 time(s).
1067        #3 was ordered 0 time(s).
1068        #4 was ordered 0 time(s).
1069        #5 was ordered 0 time(s).
1070        #6 was ordered 0 time(s).
1071 Successful customer order log:
1072 {}
1073 ------------------------------
1074
1075 =======================================
1076 === December 27 Log: ===================
1077 =======================================
1078
1079        Buns in stock: 46
1080        Patties in stock: 34
1081        Lettuce in stock: 0
1082        Tomatoes in stock: 15
1083        Onions in stock: 69
1084        Cheese Slices in stock: 75
1085 10:00 --- 76 customers arrived (26 were turned away).
1086 11:00 --- 4 customers arrived.
1087 12:00 --- 30 customers arrived.
1088 13:00 --- 84 customers arrived (34 were turned away).
1089 14:00 --- 46 customers arrived.
1090 15:00 --- 34 customers arrived.
1091 16:00 --- 9 customers arrived.
1092 17:00 --- 79 customers arrived (29 were turned away).
1093 18:00 --- 74 customers arrived (24 were turned away).
1094 19:00 --- 30 customers arrived.
1095
1096 ---End of day inventory count---
1097 Customers lost today: 466
1098 Food expired today:
1099        Buns: 0
1100        Patties: 0
1101        Lettuce: 0
1102        Tomatoes: 0
1103        Onions: 0
1104        Cheese Slices: 75
1105 Orders served today:
1106        #1 was ordered 0 time(s).
1107        #2 was ordered 0 time(s).
1108        #3 was ordered 0 time(s).
1109        #4 was ordered 0 time(s).
1110        #5 was ordered 0 time(s).
1111        #6 was ordered 0 time(s).
1112 Successful customer order log:
1113 {}
1114 ------------------------------
1115
1116 =======================================
1117 === December 28 Log: ===================
1118 =======================================
1119
1120        Buns in stock: 46
1121        Patties in stock: 34
1122        Lettuce in stock: 0
1123        Tomatoes in stock: 15
1124        Onions in stock: 69
```

```
      Cheese Slices in stock: 0
10:00 --- 51 customers arrived (1 were turned away).
11:00 --- 43 customers arrived.
12:00 --- 40 customers arrived.
13:00 --- 59 customers arrived (9 were turned away).
14:00 --- 84 customers arrived (34 were turned away).
15:00 --- 74 customers arrived (24 were turned away).
16:00 --- 23 customers arrived.
17:00 --- 64 customers arrived (14 were turned away).
18:00 --- 40 customers arrived.
19:00 --- 72 customers arrived (22 were turned away).

---End of day inventory count---
Customers lost today: 550
Food expired today:
      Buns: 0
      Patties: 0
      Lettuce: 0
      Tomatoes: 15
      Onions: 0
      Cheese Slices: 0
Orders served today:
      #1 was ordered 0 time(s).
      #2 was ordered 0 time(s).
      #3 was ordered 0 time(s).
      #4 was ordered 0 time(s).
      #5 was ordered 0 time(s).
      #6 was ordered 0 time(s).
Successful customer order log:
{}
------------------------------

=========================================
=== December 29 Log: ====================
=========================================

A new shipment arrived!
      Buns in stock: 177
      Patties in stock: 140
      Lettuce in stock: 111
      Tomatoes in stock: 134
      Onions in stock: 208
      Cheese Slices in stock: 110
10:00 --- 76 customers arrived (26 were turned away).
11:00 --- 39 customers arrived.
12:00 --- 57 customers arrived (7 were turned away).
13:00 --- 84 customers arrived (34 were turned away).
14:00 --- 97 customers arrived (47 were turned away).
15:00 --- 36 customers arrived.
16:00 --- 91 customers arrived (41 were turned away).
17:00 --- 68 customers arrived (18 were turned away).
18:00 --- 30 customers arrived.
19:00 --- 20 customers arrived.

---End of day inventory count---
Customers lost today: 502
Food expired today:
      Buns: 0
      Patties: 34
```

```
         Lettuce: 0
         Tomatoes: 0
         Onions: 0
         Cheese Slices: 0
 Orders served today:
         #1 was ordered 10 time(s).
         #2 was ordered 15 time(s).
         #3 was ordered 15 time(s).
         #4 was ordered 22 time(s).
         #5 was ordered 17 time(s).
         #6 was ordered 17 time(s).
 Successful customer order log:
 {Customer 1: 3, Customer 2: 4, Customer 3: 4, Customer 4: 2, Customer 5: 2,
      Customer 6: 4, Customer 7: 1, Customer 8: 2, Customer 9: 2, Customer 10: 6,
      Customer 11: 4, Customer 12: 1, Customer 13: 4, Customer 14: 6, Customer 15: 4,
       Customer 16: 5, Customer 17: 5, Customer 18: 5, Customer 19: 3, Customer 20:
      2, Customer 21: 3, Customer 22: 5, Customer 23: 4, Customer 24: 4, Customer 25:
       6, Customer 26: 5, Customer 27: 4, Customer 28: 6, Customer 29: 5, Customer
      30: 3, Customer 31: 2, Customer 32: 4, Customer 33: 5, Customer 34: 6, Customer
       35: 1, Customer 36: 5, Customer 37: 3, Customer 38: 2, Customer 39: 3,
      Customer 40: 3, Customer 41: 2, Customer 42: 5, Customer 43: 1, Customer 44: 2,
       Customer 45: 4, Customer 46: 5, Customer 47: 5, Customer 48: 6, Customer 49:
      6, Customer 50: 4, Customer 77: 5, Customer 78: 2, Customer 79: 3, Customer 80:
       5, Customer 81: 6, Customer 82: 6, Customer 83: 1, Customer 84: 4, Customer
      85: 3, Customer 86: 6, Customer 87: 6, Customer 88: 2, Customer 89: 5, Customer
       90: 5, Customer 91: 3, Customer 92: 4, Customer 93: 6, Customer 94: 4,
      Customer 95: 2, Customer 96: 3, Customer 97: 2, Customer 98: 4, Customer 99: 3,
       Customer 100: 2, Customer 101: 6, Customer 102: 3, Customer 103: 2, Customer
      104: 6, Customer 105: 4, Customer 106: 1, Customer 107: 4, Customer 108: 4,
      Customer 109: 4, Customer 110: 1, Customer 111: 5, Customer 112: 4, Customer
      113: 6, Customer 114: 1, Customer 115: 1, Customer 116: 1, Customer 117: 3,
      Customer 118: 4, Customer 119: 5, Customer 120: 3, Customer 121: 6, Customer
      122: 6}
 ------------------------------

 =========================================
 === December 30 Log: ====================
 =========================================

         Buns in stock: 96
         Patties in stock: 25
         Lettuce in stock: 0
         Tomatoes in stock: 55
         Onions in stock: 151
         Cheese Slices in stock: 78
 10:00 --- 30 customers arrived.
 11:00 --- 61 customers arrived (11 were turned away).
 12:00 --- 98 customers arrived (48 were turned away).
 13:00 --- 24 customers arrived.
 14:00 --- 31 customers arrived.
 15:00 --- 91 customers arrived (41 were turned away).
 16:00 --- 97 customers arrived (47 were turned away).
 17:00 --- 48 customers arrived.
 18:00 --- 90 customers arrived (40 were turned away).
 19:00 --- 20 customers arrived.

 ---End of day inventory count---
 Customers lost today: 590
 Food expired today:
```

```
1223      Buns: 46
1224      Patties: 0
1225      Lettuce: 0
1226      Tomatoes: 0
1227      Onions: 69
1228      Cheese Slices: 0
1229 Orders served today:
1230      #1 was ordered 0 time(s).
1231      #2 was ordered 0 time(s).
1232      #3 was ordered 0 time(s).
1233      #4 was ordered 0 time(s).
1234      #5 was ordered 0 time(s).
1235      #6 was ordered 0 time(s).
1236 Successful customer order log:
1237 {}
1238 ------------------------------
1239
1240 =======================================
1241 === December 31 Log: ==================
1242 =======================================
1243
1244      Buns in stock: 50
1245      Patties in stock: 25
1246      Lettuce in stock: 0
1247      Tomatoes in stock: 55
1248      Onions in stock: 82
1249      Cheese Slices in stock: 78
1250 10:00 --- 93 customers arrived (43 were turned away).
1251 11:00 --- 28 customers arrived.
1252 12:00 --- 13 customers arrived.
1253 13:00 --- 34 customers arrived.
1254 14:00 --- 62 customers arrived (12 were turned away).
1255 15:00 --- 89 customers arrived (39 were turned away).
1256 16:00 --- 17 customers arrived.
1257 17:00 --- 90 customers arrived (40 were turned away).
1258 18:00 --- 81 customers arrived (31 were turned away).
1259 19:00 --- 66 customers arrived (16 were turned away).
1260
1261 ---End of day inventory count---
1262 Customers lost today: 573
1263 Food expired today:
1264      Buns: 0
1265      Patties: 0
1266      Lettuce: 0
1267      Tomatoes: 0
1268      Onions: 0
1269      Cheese Slices: 78
1270 Orders served today:
1271      #1 was ordered 0 time(s).
1272      #2 was ordered 0 time(s).
1273      #3 was ordered 0 time(s).
1274      #4 was ordered 0 time(s).
1275      #5 was ordered 0 time(s).
1276      #6 was ordered 0 time(s).
1277 Successful customer order log:
1278 {}
1279 ------------------------------
1280
1281 =======================================
```

```
1282  ===  January 01 Log:  =====================
1283  ========================================
1284
1285  This In-N-Out is shut down for having consistently low sales and customer
           satisfaction, despite high customer throughput. If only the higher-ups at In-N-
           Out waited until this data got back, then maybe they would have noticed that it
            was their own fault for not supplying the store with enough food.
```