**2010 Question 1: Cookie Order (9 points)**

| Total Scored out of 9 |  |
| --- | --- |

**Part A: getTotalBoxes (3 points)**

*Intent: Compute and return the sum of the number of boxes of all cookie orders in* orders

Consider all CookieOrder objects in orders

+1/2 Accesses any element of orders

+1/2 Accesses all elements of orders with no out-of-bounds access potential

Computes total number of boxes

+1/2 Creates an accumulator (declare and initialize)

+1/2 Invokes getNumBoxes on object of type CookieOrder

+1/2 Correctly accumulates total number of boxes

+1/2 Returns computed total

**Part B: removeVariety (6 points)**

*Intent: Remove all* CookieOrder *objects from orders whose variety matches* cookieVar*; return total number of boxes removed*

Identifies and removes matching CookieOrder objects

+1/2 Accesses an element of orders

+1/2 Compares parameter cookieVar with getVariety() of a CookieOrder object (must use .equals or .compareTo)

+1 Compares parameter cookieVar with getVariety() of all CookieOrder objects in orders, no out-of-bounds access potential

+1/2 Removes an element from orders

+1/2 Removes only matching CookieOrder objects

+1 Removes all matching CookieOrder objects, no elements skipped

Computes total number of boxes in removed CookieOrder objects

+1/2 Creates an accumulator (declare and initialize)

+1/2 Invokes getNumBoxes on object of type CookieOrder

+1/2 Correctly accumulates total number of boxes (must be in context of loop and match with cookieVar)

+1/2 Returns computed total

**Usage Penalties**

-1 consistently references incorrect name instead of orders, of potentially correct type

-1 1/2 consistently references incorrect name instead of orders, incorrect type (e.g., this, MasterOrder)