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1  /*
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3  CIS 1202 101
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5  */
6
7  #include "personalLibrary.h"
8
9  void loadArrays(string[], int[], float[], int);
10 void calculateValues(int[], float[], float[], int);
11 void displayTable(string[], int[], float[], float[], int);
12
13
14
15 int main() {
16
17     const int SIZE = 6;
18     string product[SIZE];
19     int quantity[SIZE];
20     float cost[SIZE];
21     float value[SIZE];
22     int items = 0;
23
24     loadArrays(product, quantity, cost, SIZE);
25     calculateValues(quantity, cost, value, SIZE);
26     displayTable(product, quantity, cost, value, SIZE);
27
28     endProgram();
29 }
30
31 void loadArrays(string product[], int quantity[], float cost[], int SIZE) {
32     ifstream fin;
33     int items = 0;
34     fin.open("inventory.txt");
35     if (fin.is_open()) {
36         while (items < SIZE && fin >> product[items] >> quantity[items] >>
37             cost[items]) {
38             items++;
39         }
40     }
41     else {
42         cout << "Unable to open file";
43     }
44 }
45 void calculateValues(int quantity[], float cost[], float value[], int SIZE)
46 {
47     for (int i = 0; i < SIZE; i++) {
48         value[i] = quantity[i] * cost[i];
49     }
50 }
```

```
48     }
49 }
50 void displayTable(string product[], int quantity[], float cost[], float
    value[], int SIZE) {
51
52     float totalValue = 0;
53     float averageValue = 0;
54     cout << "Product Code" << setw(20) << "Quantity" << setw(20)
55         << "Cost Each" << setw(20) << "Total Value" << endl;
56
57     for (int i = 0; i < SIZE; i++) {
58         cout << product[i] << setw(20) << quantity[i]
59             << setw(20) << fixed << setprecision(2) << cost[i] << setw(20)
60             << value[i] << endl;
61         totalValue += value[i];
62     }
63     // cout << "\nThe product with the highest inventory is " <<
64     // i have no clue how to do the highest inventory thing
65     averageValue = totalValue / SIZE;
66     cout << "\nThe average cost of an inventory item is $" <<
        averageValue;
67 }
```