

```

76 #include <iostream>
77 #include <iomanip>
78 #include <fstream>
79 using namespace std;
80
81 int main ()
82 {
83     const double TAX_RATE = 0.0825;
84     const double DISCOUNT = 0.20;
85     const double SHIPPING_CHARGE = 8.50;
86     const double FREE_SHIPPING_MIN = 150.00;
87
88     int items = 0;
89
90     double total = 0;
91     double discounted_total = 0;
92     double shipping = 0;
93     double item_price = 0;
94
95     ofstream fout;
96     fout.open("prog4_007.txt");
97
98     cout << "Enter the number of items purchased: ";
99     cin >> items;
100
101     if (items == 0)
102     {
103         cout << endl << "Come back again soon!" << endl;
104     }
105     else
106     {
107         for (int i = 1; i <= items; i++)
108         {
109             cout << "Enter item price: ";
110             cin >> item_price;
111             total += item_price;
112         }
113
114         discounted_total = total - (total * DISCOUNT);
115
116         if (discounted_total >= FREE_SHIPPING_MIN)
117         {
118             shipping = 0;
119         }
120         else
121         {
122             shipping = SHIPPING_CHARGE;
123         }
124
125         cout << endl << endl;
126         cout << fixed << setprecision(2) << "Aaron Luna" <<
            endl;
127         cout << "C.S.1428.007" << endl << "Lab Section: L07"
            << endl;
128
129         Purchases: $ ";
130     }

```

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125     cout << endl << endl;
126     cout << fixed << setprecision(2) << "Aaron Luna" <<
        endl;
127     cout << "C.S.1428.007" << endl << "Lab Section: L07"
        << endl;
128     cout << "10/28/20" << endl << endl << "Total
        Purchases: $ ";
129     cout << total << endl << "Discounted Total: " <<
        discounted_total;
130     cout << endl << "Tax Rate: " << fixed <<
        setprecision(4);
131     cout << TAX_RATE << endl << fixed << setprecision(2)
        << "Tax: ";
132     cout << discounted_total * TAX_RATE << endl <<
        "Shipping: ";
133     cout << shipping << endl << endl << "Total Amount
        Due: $ ";
134     cout << discounted_total + shipping +
        (discounted_total * TAX_RATE);
135     cout << endl << endl;
136     cout << "A copy for your records can be found in
        prog4_007out.txt" << endl;
137
138     fout << "Aaron Luna" << endl
139         << "C.S.1428.007" << endl
140         << "Lab Section: L09" << endl
141         << "10/28/20" << endl << endl
142         << "Total Purchases: $ " << total << endl
143         << "Discounted Total: " << discounted_total
            << endl
144         << "Tax Rate: " << fixed <<
            setprecision(3) << TAX_RATE << endl
145         << fixed << setprecision(1)
            << "Tax: " << discounted_total
            * TAX_RATE << endl
146         << "Shipping: " << shipping << endl
            << endl
147         << "Total Amount Due: $ " << discounted_total
            + shipping + (discounted_total * TAX_RATE)
            << endl << endl;
148
149     fout.close();
150
151     }
152
153     system("PAUSE>NUL");
154     return 0;
155
156     }
157
158     }
159
160

```