

```

1: #include<iostream>
2: #include<fstream>
3:
4: using namespace std;
5:
6: // start 6:12 am
7:
8: // Class definition
9: class Product{           // 1m
10:     private:
11:         int code;        // 1m
12:         double price;    // 1m
13:         int quantity;    // 1m
14:
15:     public:
16:         Product(int c=0, double p=0, int q=0){ set(c,p,q);} // 1m
17:         void set(int c, double p, int q){
18:             code = c;
19:             price = p;
20:             quantity = q;
21:         }
22:
23:         void setCode(int c){ code=c;} // 1m
24:         void setPrice(double p){price=p;} // 1m
25:         void setQuantity(int q){ quantity=q;} // 1m
26:
27:         int getCode() const{return code;} // 1m
28:         double getPrice() const{return price;} // 1m
29:         int getQuantity() const{return quantity;} // 1m
30: };
31: // 6:17
32:
33: int main()
34: {

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35: Product products[100]; // 1m goes to 'using array'
36: int n;
37: int code, qty;
38: double price;
39:
40: cout << "How many products you want to enter => ";
41: cin >> n; // 1m
42:
43: for (int i=0; i<n; i++){ // 1m goes to 'allowing to enter list of products'
44:     cout << endl;
45:     cout << "Enter Product #" << (i+1) << ": " << endl; // 1m
46:     cout << " Code => ";
47:     cin >> code; // 1m
48:
49:     cout << " Price => ";
50:     cin >> price; // 1m
51:
52:     cout << " Quantity => ";
53:     cin >> qty; // 1m
54:
55:     products[i].setCode(code); // 1m goes to 'using array'
56:     products[i].setPrice(price); // 1m goes to 'using array'
57:     products[i].setQuantity(qty); // 1m goes to 'using array'
58: }
59: // 6:21
60:
61: fstream fout;
62: fout.open("product.dat", ios::out|ios::binary); // 1m
63: fout.write((char*)&products, sizeof(Product)*n); // 2m
64: fout.close(); // 1m
65:
66: // or
67: /*
68: for (int i=0; i<n; i++) // 1m

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69:     fout.write((char*)&products, sizeof(Product)); // 1m
70: */
71:
72: // 6:24
73:
74: cout << endl << endl;
75: cout << "No.\tProduct Code \t Price \t Quantity \t Total" << endl;
76: for (int i=0; i<n; i++){ // 1m
77:     cout << (i+1) << "\t" // 1m
78:         << products[i].getCode() << "\t" // 1m
79:         << products[i].getPrice() << "\t" // 1m
80:     quantity = q;products[i].getQuantity() <<
81:         << (products[i].getPrice() * products[i].getQuantity() )<< endl; // 1m
82: }
83:
84: // 6:27 am
85:
86: cout << endl;
87: cout << "Dear user. The list has also been saved in a binary file" << endl;
88:
89: return 0;
90: }
91:

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