

The screenshot shows a C++ IDE with the following components:

- Projects Panel:** Lists several projects, including 'Gaddis_9thEd_Chap2_Prob08_TotalPurchase' which is currently selected.
- Source Editor:** Displays the code for 'totalpurchase.cpp'. The code includes comments, system and user libraries, and a main function that calculates the total price of five items with a 7% sales tax.
- Navigator:** Shows the file structure of the project, with 'totalpurchase.cpp' highlighted.
- Output Window:** Displays the results of running the program, showing the price of each item, the subtotal, the sales tax, and the final total price.

```
1  /*
2  File: totalpurchase.cpp
3  Author: Kevin Morris
4  Created on June 24, 2022, 7:38 PM
5  *Purpose: A customer in a store is purchasing five items.
6  * The prices of the five items are as follows:
7  *Write a program that holds the prices of the five items in five variables.
8  Display each item's price, the subtotal of the sale, the amount of sales tax,
9  *and total.
10 Assume the sales tax is 7%.
11 */
12 //System Libraries
13 #include<iostream>
14 #include<iomanip>
15 using namespace std;
16 //User Libraries
17 //Global Constants
18 //Mathematical/Physics/Conversions, Higher dimensioned arrays
19 //Function Prototypes
20 //Execution Begins Here
21 int main(int arg, char** argv) {
22 // Initialize the Random Number Seed
23 //Declare Variables
24 float Prco, Prct, Proth, Prcf, Prcfi, subTl, slsTx, tlPrce;
25 Prco=15.95; //Price of item 1= $15.95.
26 Prct=24.95; //Price of item 2= $24.95.
27 Proth=6.95; //Price of item 3= $6.95.
28 Prcf=12.95; //Price of item 4= $12.95.
29 Prcfi=3.95; //Price of item 5= $3.95.
30 //Initialize Variables
31 //Map inputs to outputs-> The Process
32 subTl=(Prco)+(Prct)+(Proth)+(Prcf)+(Prcfi); //The sum of all five items.
33 slsTx=.07; //Sales tax is 7%
34 tlPrce=(subTl)+(tlPrce); //Total price including tax.
35 subTl=(Prco)+(Prct)+(Proth)+(Prcf)+(Prcfi);
36 slsTx=subTl*(7./100);
37 tlPrce=subTl+slsTx;
```

Output - Gaddis_9thEd_Chap2_Prob08_TotalPurchase (Run)

The price of item one =	\$15.95.
The price of item two =	\$24.95.
The price of item three =	\$6.95.
The price of item four =	\$12.95.
The price of item five =	\$3.95.
The subtotal of all items before tax =	\$64.75.
The sales tax of 7% on the total of all items =	\$4.53.
The total price including sales tax =	\$69.28.

RUN SUCCESSFUL (total time: 147ms)

Projects × Files Services — totalpurchase.cpp ×

Source History

```

24     float Prco,Prct,Prcth,Prctf,Prctfi,subTl,slsTx,tlPrce;
25     Prco=15.95;//Price of item 1= $15.95.
26     Prct=24.95;//Price of item 2= $24.95.
27     Prcth=6.95;//Price of item 3= $6.95.
28     Prctf=12.95;//Price of item 4= $12.95.
29     Prctfi=3.95;//Price of item 5= $3.95.
30     //Initialize Variables
31     //Map inputs to outputs-> The Process
32     subTl=(Prco)+(Prct)+(Prcth)+(Prctf)+(Prctfi);//The sum of all five items.
33     slsTx=.07;//Sales tax is 7%
34     tlPrce=(subTl)+(slsTx);//Total price including tax.
35     subTl=(Prco)+(Prct)+(Prcth)+(Prctf)+(Prctfi);
36     slsTx=subTl*(7./100);
37     tlPrce=subTl+slsTx;
38     //Display Results
39     cout<<"The price of item one =                $"<<(Prco);
40     cout<<"."<<endl;
41     cout<<"The price of item two =                $"<<(Prct);
42     cout<<"."<<endl;
43     cout<<"The price of item three =              $"<<(Prcth);
44     cout<<"."<<endl;
45     cout<<"The price of item four =              $"<<(Prctf);
46     cout<<"."<<endl;
47     cout<<"The price of item five =              $"<<(Prctfi);
48     cout<<"."<<endl;
49     cout<<setprecision(4);
50     cout<<"The subtotal of all items before tax =    $"<<(subTl);
51     cout<<"."<<endl;
52     cout<<setprecision(3);
53     cout<<"The sales tax of 7% on the total of all items = $"<<(slsTx);
54     cout<<"."<<endl;
55     cout<<setprecision(4);
56     cout<<"The total price including sales tax =    $"<<(tlPrce);
57     cout<<"."<<endl;
58     //Exit stage right
59     return 0;
60 }

```

main(int arg, char** argv) - Navigator ×

main(int arg, char** argv)

Output - Gaddis_9thEd_Chap2_Prob08_TotalPurchase (Run) ×

```

The price of item one =                $15.95.
The price of item two =                $24.95.
The price of item three =              $6.95.
The price of item four =              $12.95.
The price of item five =               $3.95.
The subtotal of all items before tax =   $64.75.
The sales tax of 7% on the total of all items = $4.53.
The total price including sales tax =    $69.28.

RUN SUCCESSFUL (total time: 147ms)

```