

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

- Projects Panel:** Lists the project structure, including 'Gaddis\_9thEd\_Chap2\_Prob18\_EnergyDrinkConsumption' and its subfolders (Header Files, Resource Files, Source Files, Test Files, Important Files).
- Source Code Editor:** Displays the code for `energydrinkconsumption.cpp`. The code includes system and user libraries, defines constants, and implements a `main` function that calculates the number of energy and citrus drinkers based on survey data.
- Navigator:** Shows the `main(int argc, char** argv)` function.
- Output Window:** Displays the results of the program execution.

```
1  /*
2  * File:   energydrinkconsumption.cpp
3  * Author: Kevin Morris
4  * Created on June 23, 2022, 12:01 PM
5  * Purpose: Energy Drink Problem
6  */
7  //System Libraries
8  #include <iostream>
9  using namespace std;
10 //User Libraries
11 //Global Constants
12 //Mathematical/Physics/Conversions, Higher dimensioned arrays
13 const unsigned char PERCENT=100;//Conversion to percentage
14 //Function Prototypes
15 //Execution Begins Here
16 int main(int argc, char** argv) {
17     // Initialize the Random Number Seed
18     //Declare Variables
19     unsigned short cstSrvy;//Number of Customers Surveyed
20     unsigned short nEDkr;//Number of customers that are energy Drinkers
21     unsigned short nCDkr;//Number of Customers that are citrus Drinkers
22     unsigned char prcEDkr;//Percent Energy Drinkers
23     unsigned char prcCDkr;//Percent Citrus Drinkers
24     //Initialize Variables
25     cstSrvy=16500;//16,00
26     prcEDkr=15;//15 Percent
27     prcCDkr=58;//58 Percent
28     //Map inputs to outputs-> The Process
29     nEDkr=cstSrvy*prcEDkr/PERCENT;
30     nCDkr=nEDkr*prcCDkr/PERCENT;
31     //Display Results
32     cout<<"Number of Customers that use Energy Drinks    = "<<nEDkr<<endl;
33     cout<<"Number of Customers that prefer Citrus Drinks = "<<nCDkr<<endl;
34     //Exit stage right
35     return 0;
36 }
```

**Output - Gaddis\_9thEd\_Chap2\_Prob18\_EnergyDrinkConsumption (Run)**

```
Number of Customers that use Energy Drinks    = 2475
Number of Customers that prefer Citrus Drinks = 1435
RUN SUCCESSFUL (total time: 739ms)
```