



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

- Projects Panel:** Lists the project structure, including `CPPTemplate`, `Gaddis_9thEd_Chap2_Prob20_HowMuchPaint`, `Gaddis_9thEd_Chap2_Prob10_MPG`, `Header Files`, `Resource Files`, `Source Files` (containing `mpg.cpp`), `Test Files`, `Important Files`, and `Gaddis_9thEd_Chap2_Prob18_EnergyDrinkConsumption`.
- Source Code Editor:** Displays the source code for `mpg.cpp`. The code includes comments, system libraries, user libraries, global constants, function prototypes, and a `main` function. The `main` function initializes variables, calculates MPG, and displays the results.
- Navigator:** Shows the `main(int argc, char** argv)` function.
- Output Panel:** Displays the output of the program, showing the calculated MPG and the total time taken to run.

```
1  /*
2  * File:   mpg.cpp
3  * Author: Kevin Morris
4  * Created on June 23, 2022, 12:50 PM
5  * Purpose: MPG
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 //Function Prototypes
14 //Execution Begins Here
15 int main(int argc, char** argv) {
16     // Initialize the Random Number Seed
17     //Declare Variables
18     float mlsDrvn, //Miles Driving
19           mpg, //Miles Per Gallon
20           nGalns; //Number of Gallons to fill tank
21     //Initialize Variables
22     mlsDrvn=3.75e2f; //375 miles driving on a tank of gas
23     nGalns=1.5e1f; //Number of Gallons to fill car
24     //Map inputs to outputs-> The Process
25     mpg=mlsDrvn/nGalns;
26     //Display Results
27     cout<<mpg<<" Miles Per Gallon = "
28     <<mlsDrvn<<" Miles Driving / "
29     <<nGalns<<" Gallons Used"<<endl;
30     //Exit stage right
31     return 0;
32 }
```

Output - Gaddis\_9thEd\_Chap2\_Prob10\_MPG (Run) X

```
25 Miles Per Gallon = 375 Miles Driving / 15 Gallons Used
RUN SUCCESSFUL (total time: 965ms)
```