

```
//
/*****
*
* COMPUTE DISTANCE PER TANK OF GAS
*
* This program computes the distance a car can travel on one
* tank of gas based on gas tank capacity and average
* miles-per-gallon (MPG) rating for city and highway driving.
*
* Computation is based on the formula:
* Distance = Number of Gallons x Average Miles per Gallon
*
* INPUT
* tankCapacity : Gas tank capacity in gallons
* mpgCity      : Average MPG for city driving
* mpgHighway   : Average MPG for highway driving
*
* OUTPUT
* distance     : Distance car can travel
*
*****/
```

```
#include <iostream>
#include <iomanip>
using namespace std;
int main ()
{
    float tankCapacity;    //INPUT - Gas tank capacity in gallons
    float mpgCity;         //INPUT - Average MPG for city driving
    float mpgHighway;      //INPUT - Average MPG for highway driving
    float distance;        //OUTPUT - Distance car can travel

    // Initialize Program Variables
    tankCapacity = 20.0;
    mpgCity = 21.5;
    mpgHighway = 26.8;

    // Compute Distance Traveled City
    distance = tankCapacity * mpgCity;

    // Output Result
    cout << "The car can travel " << distance << " miles in town." << endl;

    // Compute Distance Traveled Highway
    distance = tankCapacity * mpgHighway;

    // Output Result
    cout << "The car can travel " << distance << " miles highway." << endl;
    return 0;
}
```