# Output With Variables
# Mixing String Literal and Variables
# Example

**In-Class Exercise – Due: February 7, 2019 – before 10:00pm**

**Objective:** `Output with Variables`

**Important instructions:**

- *All programs must include comments at the top of your program: your name,* the class name (CSIT 575), *program name and* ***the program description (purpose of the program).***
- *Copy and paste your* ***program code*** *and* ***output*** *in Part B of each program. Note: Use snipping tool to snip the output.*
- *Once it is done, save and submit this word file via Canvas.*

1. **MilesPerGallon.cpp** program

   A car holds 20 gallons of gasoline and can travel 312 miles before refueling. Write a program that computes the number of miles per gallon the car gets. Display the result on the screen.

   **Sample Output:**

   ```
   The car gets 15.6 miles per gallon.
   ```

   **Part A: Pseudocode**

   Input or given data:

   Processing:

   Output:

   **Part B: Copy and paste your program (source) code and the outputs after this line.**

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# Example of an ICE assignment

**MilesPerGallon.cpp** program

A car holds 20 gallons of gasoline and can travel 312 miles before refueling. Write a program that computes the number of miles per gallon the car gets. Display the result on the screen.

## Part A: Pseudocode

Input or Given data – `// Define and initialize variables`

```
double gallonInTank = 20;
double milePerTank = 312;
double milesPerGallon;
```

Processing `// Calculate miles per gallon`

```
milesPerGallon = milePerTank / gallonInTank;
```

Output: `// Display result`

```
Display "Number of miles per gallon the car gets: ", milesPerGallon;
```

```cpp
// First Last Name
// CS 575 - MilePerGallon.cpp
// The program calculates how many miles per gallon a vehicle gets.

#include <iostream>
using namespace std;

int main()
{
    // Input - define and initialize variables
    double gallonsInTank = 20.0;    // Gas tank capacity in gallons
    double milesPerTank = 312.0;    // Miles driven on one tank
    double milesPerGallon;          // Miles per gallon

    // Processing - Calculate miles per gallon
    milesPerGallon = milesPerTank / gallonsInTank;

    // Output - Display result
    cout << "The car gets " << milesPerGallon << " miles per gallon.\n";
    cout << endl;

    return 0;
}
```

Your name
Class - program name
Purposes of the program

Input or given data:

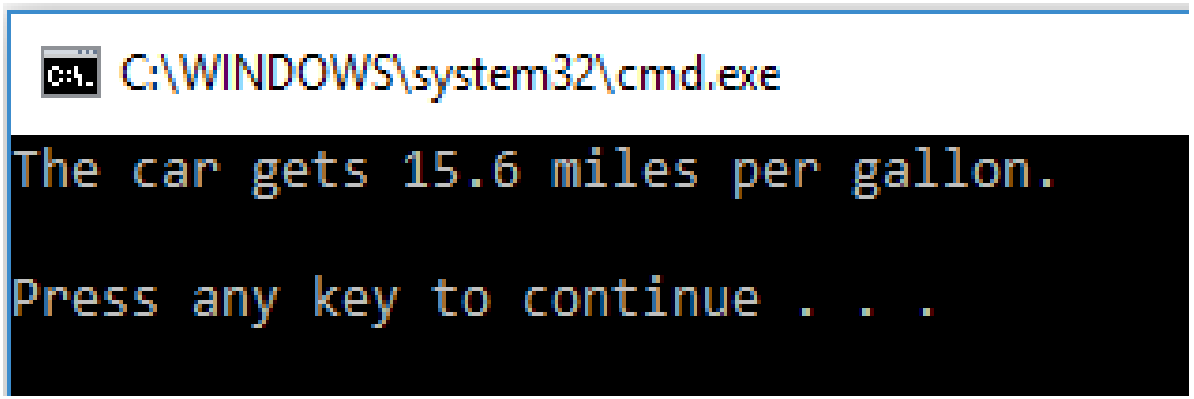
- Define and initialize variables to the given data.
- Define new variables.

Processing – calculation

Output – the result being displayed should be the same as the given sample output.

Sample Output:

```
The car gets 15.6 miles per gallon.
```




Note: Mixing String Literal and Variables