

## If Else Statement Exercise — Gas Mileage (**use as class name**)

Al's Last Chance Gas station sits on Route 190 on the edge of Death Valley. There is no other gas station for 200 miles. Write a program to help drivers decide if they need gas. The program will ask the user to enter the following:

1. The capacity of the gas tank, in gallons.
2. The indication of the current gas gauge in decimal. (Ex. What is your current gas level? Enter 1.00; 0.25; 0.50; or 0.75)
  - o full= 1.00,
  - o three quarters full = 0.75,
  - o half = 0.50
  - o one quarter = 0.25,
3. The miles per gallon of the car.

Use an If Else statement to find out if the driver can go 200 miles or more to the next gas station.

If the car can go 200 miles, the program then writes out the following:

- The tank capacity
- How many miles per gallon the car gets
- The level of the gauge
- The total number of miles you can drive with a full tank
- The total number of miles you can drive with the current tank
- And a message saying: "It's Safe to Proceed"

If the car cannot go 200 miles, the program then writes out the following:

- The tank capacity
- How many miles per gallon the car gets
- The level of the gauge
- The total number of miles you can drive with a full tank
- The total number of miles you can drive with the current tank
- And a message saying: "You will not make it. You need to stop and get gas now"

Use the following variables:

- **int** tank;
- **int** mpg;
- **double** gauge;
- **distance** distance; (**this is the total number of miles you can drive with your tank**)

Use this formula: (Tank Capacity x Gas Level) x Miles per Gallon = Distance you can drive.