# Northeastern University

## ITC 1103 Homework 4

1. Define a class called *Date*. The class should store a date in three integers: month, day, and year. There should be member functions to print the date in the following formats:

12/25/2012 // United States Format

25 December 2012 // Friendly format

Demonstrate the class by writing a complete program and implementing it.

*Input Validation: Do not accept values for the day greater than 31 or less than 1. Do not accept values for the month greater than 12 or less than 1.*

1. Write a class named Car that has the following member variables:
   1. **yearModel** - An int that holds the car’s model.
   2. **make** – A string that holds the make of the car
   3. **speed –** An int that holds the car’s current speed.

In addition, the class should have the following constructor and other member functions.

* Constructor. The constructor should accept the car’s *year model* and *make* as arguments. These values should be assigned to the object’s *yearModel* and *make* member variables
* Accessor. Appropriate accessor functions to get the values stored in an object’s *yearModel*, *make* and *speed* member variables.
* accelerate. The accelerate function should add 5 to the *speed* member variable each time it is called.
* brake. The brake function should subtract 5 from the *speed* member variable each time it is called.

Demonstrate the class in a program that creates a Car object, & then calls the accelerate function five times. After each call to the accelerate function, get the current speed of the car & display it. Then, call the brake function five times. After each call to the brake function, get the current speed of the car and display it.