

## Programming Question 1: Creating Class Library

### Specification:

Create a housing application for a rental property manager. This application includes three classes. Housing class is the base class and contains address, year built, and builder name data fields. It also contains a virtual method which returns yearly rental income. The MultiUnit class is a derived class and contains the number of units. The SingleFamily class is derived class that contains square footage of the house and also if the house has a garage. Create class libraries (.DLL files) for three classes. Create a Windows forms application to test your design.

## Programming Question 2: Using extension method

### Specification:

Create a static class named UsingExtensionMethods that defines two extension methods. The first method named SumDigits(), allows any integer to get the value that was added digit by digit. For instance, if an integer with value 1234, after the method call, it will return 10. The second method named ConvertToPigLatin(), allows any word to be converted to PigLatin form. For instance, if a word is "gift", after the method call, it is "iftgay". You can test the extension methods in a windows forms application or a console application.

**Zip both solution folders and submit them in Eagle online for grading.**