

## C# Exercise 5 - Classes

1. Create a new class called "Student". This class does not require a Main method.
2. Give the class 4 fields to hold a student's **name**, **subject**, **exam result percentage** and whether the student is **living in student housing** or not. These variables should all have the 'private' access modifier. This class should have 4 methods to print these 4 variables to the console.
3. Create a constructor which will set the 4 variables whenever a new object is created
4. Using an existing class with a Main method or creating a new class with a Main method, create 5 student objects using the student constructor method. You can make up their details except from their exam percentages which should be as follows:
  - a. Student1 is 25
  - b. Student2 is 40
  - c. Student3 is 59
  - d. Student4 is 70
  - e. Student5 is 82
5. For each student, print out the following information:  
Name: <student name>  
Subject: <subject>  
Exam result: <exam result>%  
Student housing: <true/false>
6. Create a new method in the student class which will work out the final grade for the student based on the exam result. The method should return a single grade using the following rules:
  - a. 75+ = 'A'
  - b. 60-74 = 'B'
  - c. 50-59 = 'C'
  - d. 40-49 = 'D'
  - e. 0-39 = 'F'
7. From the main method in question 5, call the method to work out each student's grade and print their result to the console.