Kursträff 8: Pair programming exercises

Use the course literature and the slides from today's lecture to discuss and answer the questions below.

1. Discuss the following terms and keywords -- what do they mean and how are they used?
   - Exception
   - throw
   - catch
   - finally
   - using-block
   - IDisposable
2. Give an example of a try/catch-block that uses int.Parse to convert a string to int and which uses Console.WriteLine to write the exception-message to the console if an exception is thrown
3. C# has a class called StringReader, which can be used to read from strings as if they were streams.
   - Create a new console application
   - In the Main()-method:
     - Create a new StringReader object from a verbatim string containing a few lines of text
       - Use a using block
     - Read the lines of the StringReader one at a time and output them to the console
4. Download and unzip the example-project BookSerializer.zip from Blackboard
   - Open the solution in VisualStudio
     - Go through the file structure together and discuss what the various files and classes in the project do
       - Look at the files Program.cs, Interfaces/ISerializeable.cs, and Models/SerializeableList.cs and discuss what they do and how they are used
   - As you may have noticed, the application doesn't function very well. There are several sections marked "TODO" in the code, in:
     - Program.cs
       - Write exceptions are unhandled
     - Data/SerializedReaderWriter.cs
       - Both the Read and Write methods are missing the code to load and save data
     - Models/Book.cs
       - The implementation of Deserialize() needs to be completed
     - Models/SerializeableList.cs
       - Exceptions aren't handled in the Deserialize()-method
   - Discuss and fix the problems above