**Context:**

This document contains assignments to be completed as part of the hands-on for the IO topics.

**Assignment 1: Working with streamreader, streamwriter**



**Estimated time: 10 Mins**

**Problem description:** Given a file having following data:

*Your name: City of Birth: Hobbies:*

Read each line to display on console. Accept user input for each question and append it to file.

Hint: Use StreamReader, StreamWriter, FileStream class to read/write the file

**Assignment 2: Working with FileInfo class**



**Estimated time: 10 Mins**

**Problem description:** Create an object of FileInfo class (passing a text file as parameter) and perform following:

*Get the full path of the text file Get the size of the file in bytes Copy the file to another location Move the file to another location*

*Use the OpenRead (), OpenText () and Open () methods of FileInfo object to read/write the file*

**Assignment 3: Working with File class**



**Estimated time: 10 Mins**

**Problem description:** Use the methods and properties of static class “File” to perform

following:

*Create file Write to file Read from file*

*Copy file to another location*

*Move file to another location*

*Replace the file with another file*

**Assignment 4: Working with DirectoryInfo class**



**Estimated time: 10 Mins**

**Problem description:** Create an object of DirectoryInfo class to perform following:

*Create a directory WorkingWithDirectoryInfo under C drive*

*Create some subdirectories within the created directory*

*Enumerate through the subdirectories and display the names on console*

*Move the complete directory to another location*

*Display the name of parent directory for the given directory*

**Assignment 5: Working with Directory class**



**Estimated time: 10 Mins**

**Problem description:** Use the properties and methods provided by static class Directory to perform following:

*Create a directory WorkingWithDirectory under C drive*

*Create some subdirectories under the given directory*

*Enumerate through the subdirectories and display the names on console*

*Move the complete directory to another location*

*Display the name of parent directory for the given directory*

**Assignment 6: Serialization/deserialization**



**Estimated time: 15 Mins**

**Problem description:** Create classes as per the UML diagram given below:

**ClsRadio**

+int Make

+String Model

**ClsCar**

+String ModelName

+Radio Radio

+int Make

+String BodyColor

+Bool hasAC

**ClsMaruthi**

+Bool HasPowerSteering

Use all three types of serialization techniques i.e. binary, SOAP and XML to serialize and deserialize objects of class ClsMaruthi.

**Summary of assignments:**

You have learnt

Working with streamreader, streamwriter

Working with FileInfo class

Working with File class

Working with DirectoryInfo class

Working with Directory class

How to serialize/deserialize objects