MIDDLE EAST TECHNICAL UNIVERSITY, NORTHERN CYPRUS CAMPUS
CNG443 – Worksheet for Lecture 7

Purpose:

In this work sheet, you will get hands-on experience with the I/O API in Java.

Tasks:

1. Write a Java program to get last modified time of a file.
2. Write a program to create a file called "test.dat" if it does not exist. Append new data to it. Write 100 integers created randomly into the file using binary I/O.
3. Write a program that stores an array of five int values: 2, 4, 6, 8, 10, and a Date object for current time, and a double value 2.7 into the file named "ex2.dat".
4. Suppose you want to track the last time a program was run. You may store a Date object to a file each time the program is run. Let the program be "ex3" and store the count it "ex3.dat". Have your program print out the previous time the program was run. If it has never run before, it should print that fact.
5. Write a program that prompts the user to enter the name of ASCII text file and display the frequency of characters in the file.
6. Write a program that prompts the user to enter a file name, reads bytes from a file, displays each byte's decimal representation. Separate each byte's decimal representation by a space. (**Hint**: You may first convert the byte value into a an 8-bit string, then convert the bit string into a decimal string).
7. Write a Java program to read first 3 lines from a file.
8. Implement a pair of classes, one Reader and one Writer, that count the number of times a particular character, such as "a", is read or written. The character can be specified when the stream is created. Write a program to test your classes. (**Hint**: Extend FilterWriter and Filter Reader).