

WIX1002 Fundamentals of Programming
Semester 1 2015/2016
Tutorial 7 File Input and Output

1. Write statements for each of the following
 - a. Store ten random integers within 0 to 1000 to a text file name integer.txt.
 - b. Read from the text file generated in a. Display all the integer and the largest integer.
 - c. Store ten random integers within 0 to 1000 to a binary file name integer.dat.
 - d. Read from the binary file generated in a c. Display the all the integer and the average.
 - e. Initialized a 3 by 4 matrix as below. Store the matrix to a text file name matrix.txt.

$$\begin{pmatrix} 8 & 10 & 4 & 9 \\ 9 & 2 & 5 & 2 \\ 6 & 7 & 2 & 6 \end{pmatrix}$$

2. Correct the error for the following statements.
 - a. `PrintWriter out = new PrintWriter(new FileOutputStream("d:\data\matrix.txt"));`
 - b.

```
try {
    PrintWriter out = new PrintWriter(new FileOutputStream("data.txt"));
    out.close();
} catch (FileNotFoundException e) {
    System.out.println("Problem with file output");
}
```
 - c.

```
int num;
Scanner a = new Scanner(new FileInputStream("data.dat"));
num = a.readInt();
a.close();
```
 - d.

```
ObjectOutputStream o = new ObjectOutputStream (new
FileOutputStream("data.dat"));
o.print('A');
o.close();
```

3. Write the statements that store the table below in a binary file name course.dat.

Course Code	Course Name
WXES1116	Programming I
WXES1115	Data Structure
WXES1110	Operating System
WXES1112	Computing Mathematics I

4. Write the statements that accepts the course code from the users and display the course name from course.dat.