WIX1002 Fundamentals of Programming
Lab 7: File Input and Output

1. Write a program that store the table below in a binary file name course.dat. Then, ask the users to enter a course code. The program will display the course name from course.dat.

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

2. The code below is used to read the contents of a Web page. Write the contents of the Web page into a text file name index.htm.

    ```java
    import java.util.Scanner;
    import java.net.URL;
    import java.io.InputStream;
    import java.net.URLConnection;
    …
      try {
        URL u = new URL("http://www.fsktm.um.edu.my");
        URLConnection cnn = u.openConnection();
        InputStream stream = cnn.getInputStream();
        Scanner in = new Scanner(stream);

      }
      catch (IOException e) {
        System.out.println("IO Error:" + e.getMessage());
      }
    ```

3. Write the statements that replace each line of a text file with its reverse and save it to a new text file name **reverse.txt**.

4. Write a program that display the number of characters, words and lines in a text file. Assume that each word is separated by one space character.

5. Write a program that read data from a binary file **person.dat**. (Please download the binary file from the Web site.) Then, display the name, age and gender (M – Male, F – Female) in ascending order sort by name. The structure of the binary file is as below:

    <intVariable-TotalNumberofRecord>
    <StringVariable-Name><IntVariable-Age><CharVariable-Gender>
    …

<StringVariable-Name><IntVariable-Age><CharVariable-Gender>

6. Write programs that merge data from two text files namely **product.txt** and **order.txt**. (Please download the text file from the Web site.) The **product.txt** contains the ProductID, ProductName, ProductPrice separated by comma. The **order.txt** contains the OrderID, ProductID, OrderQuantiy separated by comma. You program will display the ProductID, ProductName, OrderQuantity, PricePerUnit and TotalPrice for each order. (You can use the String.split(), Integer.parseInt(String) and Double.parseDouble(String))

ProductID	ProductName	Quantity	PricePerUnit	Total
SK079	Dettol Natural	20	4.99	99.80
SK013	100 Plus	74	6.49	480.26
SK088	Jasmine Pearl	27	37.99	1025.73
SK042	Ayamas Nuget Crispy	60	9.99	599.40
SK066	Ali Cafe	79	8.99	710.21