

**Department of ICT  
Faculty of Technology  
University of Ruhuna**

**ICT3253 – Distributed and Cloud Computing**

**Level 3 - Semester – 2**

**Lab Sheet 04**

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**Objectives:**

Understanding of basic concepts of I/O streams, Readers and Writers in distributed data communication.

**Java should be used as the programming language for the implementations for this lab session.**

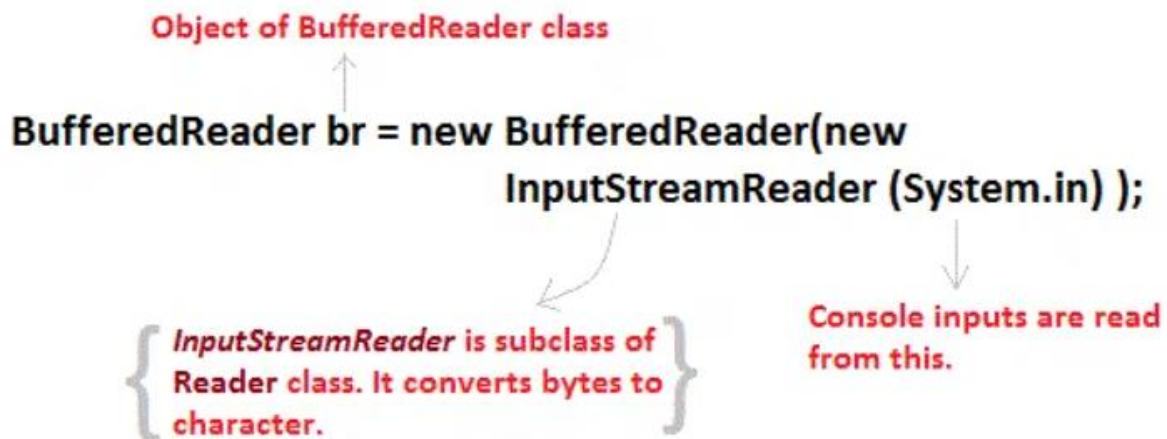
**Exercise 01**

Write down short notes about following topics.

1. Streams
2. Character Streams
3. Byte Streams
4. Input Streams
5. Output Streams

**Exercise 02 - Reading Console Input**

The object of BufferedReader class can be used to take inputs from the keyboard.



1. Write a small program to read a character from the console using BufferedReader object in Java.
2. Modify the above program to read the String input from Keyboard in Java.

### **Exercise 03**

1. Write an example program to demonstrate Byte InputStream and OutputStream in Java.
2. Write an example program to demonstrate Character Reader and Writer Stream in Java.

### **Exercise 04 - Writing to a File**

Create a Java program to write a string to a file.

### **Exercise 05 – Reading from a File**

Create a file including your details such as name, address etc. manually. Write a Java program to read a content of the file.

### **Exercise 06**

Create a lab report including all the exercises and rename it using your index number (Ex: Lab\_04\_Report\_TGXXX). Submit it together with all the java files that you implemented in exercises to the given submission link in the LMS.

***NOTE: All the programs should be saved with the extension of .java file.***