DA-IICT IT 508. Winter 2021-2022

Lab Exercise 1

Date: 25/01/2022, Expected by: 08/02/2022

This lab focuses on developing working knowledge of Java and the first implementation of mapreduce in Java. Steps to follow before starting with the problems:

- Download JDK and install in your PC.
- Download a code editor anyone from Eclipse, Netbeans, Intellij, etc.

Lab Problems:

- 1. Familiarize yourself with all the basics of Java programming covered in chapters 2 6 in [1]. You can refer to {a}, {b} for short tutorials.
- 2. Download Hadoop. Configure it in the code editor you have installed. Implement the word count program "Listing 1.2" given on Page 17 in [2]. For further help, you may refer to chapter 2 in [3]. If you are using Eclipse then you can refer to {c}, {d} for the integration of Hadoop with eclipse.

References (books) for perusal:

- [1] The Complete Reference Java, Herbert Schildt, Tata McGraw-Hill, 7th Edition.
- [2] Hadoop In Action, Chuck Lam, Manning Publications Co.
- [3] Hadoop The Definitive Guide, Tom White, O' Reilly.

References (online) for perusal:

- {a} Java Tutorial for Beginners [2020], Mosh, available on: https://www.youtube.com/watch?v= eIrMbAQSU34
- {b} Java Tutorial for Beginners in Hindi, Great Learning, available on:https://www.youtube.com/watch?v=eKRM-053ei4
- {c} Compiling Hadoop Code with Eclipse, available on: https://coursys.sfu.ca/2021fa-cmpt-732-g1/pages/EclipseHadoop.
- {d} How to Configure the Eclipse with Apache Hadoop?, available on: https://www.geeksforgeeks.org/how-to-configure-the-eclipse-with-apache-hadoop/.

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General Instructions:

- There is a lot of help available online. You should definitely search for your queries online to get an early and a better resolution.
- Your lab report must contain a list of things you learned in Java programming and the output of the code "Listing 1.2"
- The lab is intentionally made from the text books and refers to a lot of online content so that you have ample resources to refer to and learn.