In this lab you setup map-reduce programming environment with eclipse and appreciate map-reduce as programming approach.

Do following-

1. Download Hadoop files and Setup Eclipse on your system as per the instructions given in file "map-reduce-eclipse-setup.pdf".

   Here you also run your first map reduce program as per the instructions given in said file. Source code and data file are being made available to you. The program works as following:

   a. Computes maximum temperature from NCDC weather data. The data file contains weather data for two years.

   b. The program outputs max temperature for each year.

   Required source code and data are available at
   https://github.com/pmjat/NoSQL-Labs-W21/tree/main/Lab01/maxtemp

2. You are given another program that processes a "web access log" file ("web_access_log.txt") produced by a web server. You can understand about the content of web access log file from
   https://httpd.apache.org/docs/1.3/logs.html#common

   Let the Map Reduce program be called "ImageCounter".

   The program counts and outputs the number of times GIF, JPG, and other image files that have been accessed by clients.

   Required source code and data file is being shared with you.

   Place this program to package 'lab01.imagecounter'. This shall require you changing package name at top of all source files accordingly.

   Required source code and data are available at
   https://github.com/pmjat/NoSQL-Labs-W21/tree/main/Lab01/maxtemp

Submission Required:

1. Screen shot of Program Outputs
2. Each problem has one Map and One Reduce function. You need to document following for each of these functions
   a. Input parameters: Key and Value with one line description about each parameter. Description typically tells what data this parameter carries.
   b. Output: Key and Value with one line description about each output. Description typically tells what data each output emits.