**PROGRAMMING ASSIGNMENT 3**

USING MAP-REDUCE with HADOOP

**SWAMI NIKHIL**

P.F.A to this mail source files under JavaFiles Directory

LIST OF COMMANDS RAN :

**Compiling Java Files**

javac -classpath /home/hduser/Desktop/hadoop-1.1.2/hadoop-core-1.1.2.jar -d JavaFiles/assignment\_classes/ MaxRainEachStation.java

javac -classpath /home/hduser/Desktop/hadoop-1.1.2/hadoop-core-1.1.2.jar -d JavaFiles/assignment\_classes/ MaxRainPerYear.java

javac -classpath /home/hduser/Desktop/hadoop-1.1.2/hadoop-core-1.1.2.jar -d JavaFiles/assignment\_classes/ MaxRainPerYearStation.java

javac -classpath /home/hduser/Desktop/hadoop-1.1.2/hadoop-core-1.1.2.jar -d JavaFiles/assignment\_classes/ MaxTempEachStationjava

javac -classpath /home/hduser/Desktop/hadoop-1.1.2/hadoop-core-1.1.2.jar -d JavaFiles/assignment\_classes/ MaxTempPerYear.java

javac -classpath /home/hduser/Desktop/hadoop-1.1.2/hadoop-core-1.1.2.jar -d JavaFiles/assignment\_classes/ MaxTempPerYearStation.java

javac -classpath /home/hduser/Desktop/hadoop-1.1.2/hadoop-core-1.1.2.jar -d JavaFiles/assignment\_classes/ MaxWindEachStation.java

javac -classpath /home/hduser/Desktop/hadoop-1.1.2/hadoop-core-1.1.2.jar -d JavaFiles/assignment\_classes/ MaxWindPerYear.java

javac -classpath /home/hduser/Desktop/hadoop-1.1.2/hadoop-core-1.1.2.jar -d JavaFiles/assignment\_classes/ MaxWindPerYearStation.java

javac -classpath /home/hduser/Desktop/hadoop-1.1.2/hadoop-core-1.1.2.jar -d JavaFiles/assignment\_classes/ MinRainEachStation.java

javac -classpath /home/hduser/Desktop/hadoop-1.1.2/hadoop-core-1.1.2.jar -d JavaFiles/assignment\_classes/ MinRainPerYear.java

javac -classpath /home/hduser/Desktop/hadoop-1.1.2/hadoop-core-1.1.2.jar -d JavaFiles/assignment\_classes/ MinRainPerYearStation.java

javac -classpath /home/hduser/Desktop/hadoop-1.1.2/hadoop-core-1.1.2.jar -d JavaFiles/assignment\_classes/ MinTempEachStation.java

javac -classpath /home/hduser/Desktop/hadoop-1.1.2/hadoop-core-1.1.2.jar -d JavaFiles/assignment\_classes/ MinTempPerYearStation.java

javac -classpath /home/hduser/Desktop/hadoop-1.1.2/hadoop-core-1.1.2.jar -d JavaFiles/assignment\_classes/ MinimumTempPerYear.java

javac -classpath /home/hduser/Desktop/hadoop-1.1.2/hadoop-core-1.1.2.jar -d JavaFiles/assignment\_classes/ MinWindEachStation.java

javac -classpath /home/hduser/Desktop/hadoop-1.1.2/hadoop-core-1.1.2.jar -d JavaFiles/assignment\_classes/ MinWindPerYear.java

javac -classpath /home/hduser/Desktop/hadoop-1.1.2/hadoop-core-1.1.2.jar -d JavaFiles/assignment\_classes/ MinWindPerYearStation.java

**Create a** **jar file**

jar -cvf assignment\_classes/cloudassignment.jar -C assignment\_classes/ .

**START HADOOP**

$ bin/start-all.sh

**COPY INPUT FILE TO HDFS**

bin/hadoop dfs -put /home/hduser/Desktop/CDO6961436137425.txt input

**RUNNING MAP REDUCE FOR EACH FILE**

bin/hadoop jar JavaFiles/assignment\_classes/cloudassignment.jar MaxRainEachStation /user/hduser/input /user/hduser/output\_MaxRainEachStation

bin/hadoop jar JavaFiles/assignment\_classes/cloudassignment.jar MaxRainPerYear /user/hduser/input /user/hduser/output\_MaxRainPerYear

bin/hadoop jar JavaFiles/assignment\_classes/cloudassignment.jar MaxRainPerYearStation /user/hduser/input /user/hduser/output\_MaxRainPerYearStation

bin/hadoop jar JavaFiles/assignment\_classes/cloudassignment.jar MaxTempEachStation /user/hduser/input /user/hduser/output\_MaxTempEachStation

bin/hadoop jar JavaFiles/assignment\_classes/cloudassignment.jar MaxTempPerYear /user/hduser/input /user/hduser/output\_MaxTempPerYear

bin/hadoop jar JavaFiles/assignment\_classes/cloudassignment.jar MinimumTempPerYear /user/hduser/input /user/hduser/output\_MinimumTempPerYear

bin/hadoop jar JavaFiles/assignment\_classes/cloudassignment.jar MinWindEachStation /user/hduser/input /user/hduser/output\_MinWindEachStation

bin/hadoop jar JavaFiles/assignment\_classes/cloudassignment.jar MinWindPerYear /user/hduser/input /user/hduser/output\_MinWindPerYear

bin/hadoop jar JavaFiles/assignment\_classes/cloudassignment.jar MinWindPerYearStation /user/hduser/input /user/hduser/output\_MinWindPerYearStation

bin/hadoop jar JavaFiles/assignment\_classes/cloudassignment.jar MaxWindEachStation /user/hduser/input /user/hduser/output\_MaxWindEachStation

bin/hadoop jar JavaFiles/assignment\_classes/cloudassignment.jar MaxWindPerYear /user/hduser/input /user/hduser/output\_MaxWindPerYear

bin/hadoop jar JavaFiles/assignment\_classes/cloudassignment.jar MaxWindPerYearStation /user/hduser/input /user/hduser/output\_MaxWindPerYearStation

bin/hadoop jar JavaFiles/assignment\_classes/cloudassignment.jar MinRainEachStation /user/hduser/input /user/hduser/output\_MinRainEachStation

bin/hadoop jar JavaFiles/assignment\_classes/cloudassignment.jar MinRainPerYear /user/hduser/input /user/hduser/output\_MinRainPerYear

bin/hadoop jar JavaFiles/assignment\_classes/cloudassignment.jar MinRainPerYearStation /user/hduser/input /user/hduser/output\_MinRainPerYearStation

bin/hadoop jar JavaFiles/assignment\_classes/cloudassignment.jar MinTempEachStation /user/hduser/input /user/hduser/output\_MinTempEachStation

bin/hadoop jar JavaFiles/assignment\_classes/cloudassignment.jar MinTempPerYearStation /user/hduser/input /user/hduser/output\_MinTempPerYearStation

bin/hadoop jar JavaFiles/assignment\_classes/cloudassignment.jar MinimumTempPerYear /user/hduser/input /user/hduser/output\_MinimumTempPerYear

**COPYING RESULT FROM HDFS TO LOCAL FILES**

bin/hadoop dfs -copyToLocal /user/hduser/output\_MaximumTempPerYear/part-00000 /JavaFiles/OutputFiles/MaxTempPerYear/

REPLACE <MaximumTempPerYear> by repective file names for all other data.



