**NodeIterator++**

**Environment :**

Hadoop 2.7, Single node cluster, Ubuntu 16.04

Steps to Execute:

**Part A** Order file generation:

1. Compile using the below command

bin/hadoop com.sun.tools.javac.Main NodeOrdering.java

1. Jar the class files

jar -cvf NodeOrdering.jar NodeOrdering\*.class

1. Create input directory in distributed file system

bin/hadoop dfs -mkdir /input

1. Copy the input file to the input directory

bin/hadoop dfs -copyFromLocal input.dat /input/

1. Execute the code using the below command

bin/Hadoop jar NodeOrdering.jar NodeOrdering /input/input.dat <out1> <out2>

out1,out2 – specify the 2 output paths and the final output will be displayed in out2.

1. Merge the out2 folder content to create the order.dat file using the below command. This command will group the all the output file into single file and stores it in the local directory.

bin/hadoop dfs -getmerge /<out2>/ order.dat

**Part B** NodeIteratorPlus Execution:

1. Compile using the below command

bin/hadoop com.sun.tools.javac.Main NodeIteratorPlus.java

1. Jar the class files

jar -cvf NodeIteratorPlus.jar NodeIteratorPlus\*.class

1. Create input and order directory in distributed file system

bin/hadoop dfs -mkdir /input /order/

1. Copy the input file to the input directory

bin/hadoop dfs -copyFromLocal input.dat /input/

bin/hadoop dfs -copyFromLocal order.dat /order/

note: order.dat is the file generated in Part A

1. Execute the code using the below command

bin/Hadoop jar NodeIterator.jar NodeIterator /input/ <out1> /order/order.dat /input/input.dat <out2> <out3>

out1,out2,out3 – specify the 3 output paths and the final output will be displayed in out3.

Each line in the output file will have the vertex Id and number of triangles among its neighbors.