lenevo@LAPTOP-7ROANO1S:~$ start-all.sh

WARNING: Attempting to start all Apache Hadoop daemons as lenevo in 10 seconds.

WARNING: This is not a recommended production deployment configuration.

WARNING: Use CTRL-C to abort.

Starting namenodes on [localhost]

Starting datanodes

Starting secondary namenodes [LAPTOP-7ROANO1S]

Starting resourcemanager

Starting nodemanagers

lenevo@LAPTOP-7ROANO1S:~$ sudo update-java-alternatives --list

[sudo] password for lenevo:

java-1.11.0-openjdk-amd64 1111 /usr/lib/jvm/java-1.11.0-openjdk-amd64

java-1.8.0-openjdk-amd64 1081 /usr/lib/jvm/java-1.8.0-openjdk-amd64

lenevo@LAPTOP-7ROANO1S:~$ sudo update-alternatives --config java

There are 2 choices for the alternative java (providing /usr/bin/java).

Selection Path Priority Status

------------------------------------------------------------

\* 0 /usr/lib/jvm/java-11-openjdk-amd64/bin/java 1111 auto mode

1 /usr/lib/jvm/java-11-openjdk-amd64/bin/java 1111 manual mode

2 /usr/lib/jvm/java-8-openjdk-amd64/jre/bin/java 1081 manual mode

Press <enter> to keep the current choice[\*], or type selection number: ^C

lenevo@LAPTOP-7ROANO1S:~$ sudo update-alternatives --config javac

There are 2 choices for the alternative javac (providing /usr/bin/javac).

Selection Path Priority Status

------------------------------------------------------------

\* 0 /usr/lib/jvm/java-11-openjdk-amd64/bin/javac 1111 auto mode

1 /usr/lib/jvm/java-11-openjdk-amd64/bin/javac 1111 manual mode

2 /usr/lib/jvm/java-8-openjdk-amd64/bin/javac 1081 manual mode

Press <enter> to keep the current choice[\*], or type selection number: ^C

lenevo@LAPTOP-7ROANO1S:~$ echo $JAVA\_HOME

/usr/lib/jvm/java-8-openjdk-amd64

lenevo@LAPTOP-7ROANO1S:~$ cd ..

lenevo@LAPTOP-7ROANO1S:/home$ sudo update-java-alternatives --list

java-1.11.0-openjdk-amd64 1111 /usr/lib/jvm/java-1.11.0-openjdk-amd64

java-1.8.0-openjdk-amd64 1081 /usr/lib/jvm/java-1.8.0-openjdk-amd64

lenevo@LAPTOP-7ROANO1S:/home$ sudo nano ~/.bashrc

lenevo@LAPTOP-7ROANO1S:/home$ sudo nano hadoop-env.sh

lenevo@LAPTOP-7ROANO1S:/home$ cd

lenevo@LAPTOP-7ROANO1S:~$ sudo nano hadoop-env.sh

lenevo@LAPTOP-7ROANO1S:~$ cd hadoop-3.4.0

lenevo@LAPTOP-7ROANO1S:~/hadoop-3.4.0$ ls

LICENSE-binary NOTICE.txt etc libexec sbin

LICENSE.txt README.txt include licenses-binary share

NOTICE-binary bin lib logs

lenevo@LAPTOP-7ROANO1S:~/hadoop-3.4.0$ cd etc

lenevo@LAPTOP-7ROANO1S:~/hadoop-3.4.0/etc$ ls

hadoop

lenevo@LAPTOP-7ROANO1S:~/hadoop-3.4.0/etc$ cd hadoop

lenevo@LAPTOP-7ROANO1S:~/hadoop-3.4.0/etc/hadoop$ sudo nano hadoop-env.sh

lenevo@LAPTOP-7ROANO1S:~/hadoop-3.4.0/etc/hadoop$ stop-all.sh

WARNING: Stopping all Apache Hadoop daemons as lenevo in 10 seconds.

WARNING: Use CTRL-C to abort.

Stopping namenodes on [localhost]

Stopping datanodes

Stopping secondary namenodes [LAPTOP-7ROANO1S]

Stopping nodemanagers

Stopping resourcemanager

lenevo@LAPTOP-7ROANO1S:~/hadoop-3.4.0/etc/hadoop$ exit

logout

Connection to localhost closed.

lenevo@LAPTOP-7ROANO1S:~$ ssh localhost

Welcome to Ubuntu 22.04.4 LTS (GNU/Linux 5.15.146.1-microsoft-standard-WSL2 x86\_64)

\* Documentation: https://help.ubuntu.com

\* Management: https://landscape.canonical.com

\* Support: https://ubuntu.com/pro

\* Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s

just raised the bar for easy, resilient and secure K8s cluster deployment.

https://ubuntu.com/engage/secure-kubernetes-at-the-edge

Last login: Sun Apr 21 00:27:50 2024 from 127.0.0.1

lenevo@LAPTOP-7ROANO1S:~$ start-all.sh

WARNING: Attempting to start all Apache Hadoop daemons as lenevo in 10 seconds.

WARNING: This is not a recommended production deployment configuration.

WARNING: Use CTRL-C to abort.

Starting namenodes on [localhost]

Starting datanodes

Starting secondary namenodes [LAPTOP-7ROANO1S]

Starting resourcemanager

Starting nodemanagers

lenevo@LAPTOP-7ROANO1S:~$ hadoop fs -rm -r /word\_count

rm: `/word\_count': No such file or directory

lenevo@LAPTOP-7ROANO1S:~$ mkdir wordcount\_class

mkdir: cannot create directory ‘wordcount\_class’: File exists

lenevo@LAPTOP-7ROANO1S:~$ cd wordcount\_class

lenevo@LAPTOP-7ROANO1S:~/wordcount\_class$ ls

lenevo@LAPTOP-7ROANO1S:~/wordcount\_class$ gedit SumReducer.java

(gedit:53841): Gdk-WARNING \*\*: 00:49:10.001: Settings portal not found: Cannot autolaunch D-Bus without X11 $DISPLAY

(gedit:53841): IBUS-WARNING \*\*: 00:49:13.960: Failed to mkdir /home/lenevo/snap/gedit/684/.config/ibus/bus: Not a directory

(gedit:53841): dconf-WARNING \*\*: 00:49:32.853: failed to commit changes to dconf: Cannot autolaunch D-Bus without X11 $DISPLAY

lenevo@LAPTOP-7ROANO1S:~/wordcount\_class$ gedit WordMapper.java

(gedit:54242): Gdk-WARNING \*\*: 00:49:48.536: Settings portal not found: Cannot autolaunch D-Bus without X11 $DISPLAY

(gedit:54242): IBUS-WARNING \*\*: 00:49:48.838: Failed to mkdir /home/lenevo/snap/gedit/684/.config/ibus/bus: Not a directory

(gedit:54242): dconf-WARNING \*\*: 00:50:19.450: failed to commit changes to dconf: Cannot autolaunch D-Bus without X11 $DISPLAY

lenevo@LAPTOP-7ROANO1S:~/wordcount\_class$ gedit WordCount.java

(gedit:54503): Gdk-WARNING \*\*: 00:50:31.028: Settings portal not found: Cannot autolaunch D-Bus without X11 $DISPLAY

(gedit:54503): IBUS-WARNING \*\*: 00:50:31.215: Failed to mkdir /home/lenevo/snap/gedit/684/.config/ibus/bus: Not a directory

(gedit:54503): dconf-WARNING \*\*: 00:50:55.132: failed to commit changes to dconf: Cannot autolaunch D-Bus without X11 $DISPLAY

lenevo@LAPTOP-7ROANO1S:~/wordcount\_class$ gedit UN.txt

(gedit:54746): Gdk-WARNING \*\*: 00:51:08.290: Settings portal not found: Cannot autolaunch D-Bus without X11 $DISPLAY

(gedit:54746): IBUS-WARNING \*\*: 00:51:08.534: Failed to mkdir /home/lenevo/snap/gedit/684/.config/ibus/bus: Not a directory

(gedit:54746): dconf-WARNING \*\*: 00:51:38.746: failed to commit changes to dconf: Cannot autolaunch D-Bus without X11 $DISPLAY

lenevo@LAPTOP-7ROANO1S:~/wordcount\_class$ hdfs dfs -mkdir /word\_count/

lenevo@LAPTOP-7ROANO1S:~/wordcount\_class$ hdfs dfs -put UN.txt /word\_count/

lenevo@LAPTOP-7ROANO1S:~/wordcount\_class$ javac -cp $(hadoop classpath) \*.java

Note: WordCount.java uses or overrides a deprecated API.

Note: Recompile with -Xlint:deprecation for details.

lenevo@LAPTOP-7ROANO1S:~/wordcount\_class$ jar -cvf wordcount.jar \*.class

added manifest

adding: SumReducer.class(in = 1587) (out= 661)(deflated 58%)

adding: WordCount.class(in = 2224) (out= 1132)(deflated 49%)

adding: WordMapper.class(in = 1684) (out= 698)(deflated 58%)

lenevo@LAPTOP-7ROANO1S:~/wordcount\_class$ hadoop jar wordcount.jar WordCount /word\_count/UN.txt /word\_count/Output

2024-04-21 00:52:59,863 INFO client.DefaultNoHARMFailoverProxyProvider: Connecting to ResourceManager at /0.0.0.0:8032

2024-04-21 00:53:00,905 INFO mapreduce.JobResourceUploader: Disabling Erasure Coding for path: /tmp/hadoop-yarn/staging/lenevo/.staging/job\_1713640582321\_0001

2024-04-21 00:53:01,371 INFO input.FileInputFormat: Total input files to process : 1

2024-04-21 00:53:01,537 INFO mapreduce.JobSubmitter: number of splits:1

2024-04-21 00:53:01,717 INFO mapreduce.JobSubmitter: Submitting tokens for job: job\_1713640582321\_0001

2024-04-21 00:53:01,717 INFO mapreduce.JobSubmitter: Executing with tokens: []

2024-04-21 00:53:01,937 INFO conf.Configuration: resource-types.xml not found

2024-04-21 00:53:01,938 INFO resource.ResourceUtils: Unable to find 'resource-types.xml'.

2024-04-21 00:53:02,584 INFO impl.YarnClientImpl: Submitted application application\_1713640582321\_0001

2024-04-21 00:53:02,625 INFO mapreduce.Job: The url to track the job: http://LAPTOP-7ROANO1S.:8088/proxy/application\_1713640582321\_0001/

2024-04-21 00:53:02,626 INFO mapreduce.Job: Running job: job\_1713640582321\_0001

2024-04-21 00:53:18,656 INFO mapreduce.Job: Job job\_1713640582321\_0001 running in uber mode : false

2024-04-21 00:53:18,657 INFO mapreduce.Job: map 0% reduce 0%

2024-04-21 00:55:31,471 INFO mapreduce.Job: map 100% reduce 0%

2024-04-21 00:55:38,519 INFO mapreduce.Job: map 100% reduce 100%

2024-04-21 00:55:39,536 INFO mapreduce.Job: Job job\_1713640582321\_0001 completed successfully

2024-04-21 00:55:39,672 INFO mapreduce.Job: Counters: 54

File System Counters

FILE: Number of bytes read=5780

FILE: Number of bytes written=630289

FILE: Number of read operations=0

FILE: Number of large read operations=0

FILE: Number of write operations=0

HDFS: Number of bytes read=3155

HDFS: Number of bytes written=2456

HDFS: Number of read operations=8

HDFS: Number of large read operations=0

HDFS: Number of write operations=2

HDFS: Number of bytes read erasure-coded=0

Job Counters

Launched map tasks=1

Launched reduce tasks=1

Data-local map tasks=1

Total time spent by all maps in occupied slots (ms)=124776

Total time spent by all reduces in occupied slots (ms)=3792

Total time spent by all map tasks (ms)=124776

Total time spent by all reduce tasks (ms)=3792

Total vcore-milliseconds taken by all map tasks=124776

Total vcore-milliseconds taken by all reduce tasks=3792

Total megabyte-milliseconds taken by all map tasks=127770624

Total megabyte-milliseconds taken by all reduce tasks=3883008

Map-Reduce Framework

Map input records=4

Map output records=467

Map output bytes=4840

Map output materialized bytes=5780

Input split bytes=104

Combine input records=0

Combine output records=0

Reduce input groups=259

Reduce shuffle bytes=5780

Reduce input records=467

Reduce output records=259

Spilled Records=934

Shuffled Maps =1

Failed Shuffles=0

Merged Map outputs=1

GC time elapsed (ms)=1504

CPU time spent (ms)=45360

Physical memory (bytes) snapshot=448692224

Virtual memory (bytes) snapshot=5490421760

Total committed heap usage (bytes)=342884352

Peak Map Physical memory (bytes)=270602240

Peak Map Virtual memory (bytes)=2741342208

Peak Reduce Physical memory (bytes)=178089984

Peak Reduce Virtual memory (bytes)=2749079552

Shuffle Errors

BAD\_ID=0

CONNECTION=0

IO\_ERROR=0

WRONG\_LENGTH=0

WRONG\_MAP=0

WRONG\_REDUCE=0

File Input Format Counters

Bytes Read=3051

File Output Format Counters

Bytes Written=2456

lenevo@LAPTOP-7ROANO1S:~/wordcount\_class$ hadoop fs -cat /word\_count/Output/part-r-00000

193 1

1945 3

1947 1

1960s 1

1970s 1

1994 1

2001 1

2007 1

24 2

51 1

A 1

After 1

April 1

Assembly 1

At 1

Ban 1

Bank 1

Bosnia 1

Cambodia 1

Charter 1

City 1

Cold 2

Congo 2

Council 3

Court 1

D 1

Democratic 1

During 1

ECOSOC 2

Economic 1

Food 1

Franklin 1

General 2

Geneva 1

Group 1

Headquarters 1

Health 1

II 2

International 1

Israel 1

Its 1

June 1

Justice 1

Ki 1

Korea 2

Kuwait 1

League 2

Nairobi 1

Namibia 1

Nations 5

New 1

Nobel 1

Non 1

October 2

Organization 1

Other 1

Peace 1

President 1

Prize 1

Programme 1

Republic 1

Roosevelt 1

Rwanda 1

Secretariat 1

Secretary 1

Security 1

Social 1

Somalia 1

Some 1

South 1

Sudan 1

System 1

The 8

Trusteeship 1

UN 12

UNESCO 1

UNICEF 1

US 2

USSR 1

United 3

Vienna 1

War 4

World 5

York 1

a 3

actions 1

agencies 3

agency 1

aid 1

allies 1

also 1

an 3

and 26

another 1

approving 1

are 1

armed 1

as 2

assembly 1

assessed 1

at 1

awarded 1

be 2

been 2

began 1

believe 1

between 1

biased 1

budget 1

by 5

called 1

cases 1

certain 1

charter 1

co 1

commentators 1

complicated 1

conference 1

conflict 2

consultative 1

contributions 1

cooperation 1

corrupt 1

created 1

creation 1

decades 1

deciding 1

decolonization 1

degrees 1

deliberative 1

development 4

disaster 1

drafted 1

early 1

economic 3

effect 1

effectiveness 1

end 1

environment 1

established 1

evaluations 1

facilities 1

famine 1

far 1

financed 1

following 2

for 7

force 1

fostering 1

founding 1

from 1

further 1

governmental 1

granted 1

grew 1

had 1

has 1

have 3

held 1

human 2

humanitarian 1

important 1

in 12

inactive 1

include 2

ineffective 2

information 1

initiated 1

intergovernmental 1

international 4

is 3

its 6

judicial 1

main 2

maintaining 1

major 2

may 1

member 2

membership 1

military 1

mission 1

missions 1

mixed 1

moon 1

most 1

natural 1

needed 1

now 1

number 1

objectives 1

of 11

office 1

officer 1

officers 1

offices 1

on 5

operation 2

or 1

organ 1

organisation 7

organisations 1

organization 1

organs 1

other 1

others 1

outstripped 1

participate 1

participated 1

peace 4

peacekeeping 2

preserve 1

prevent 1

primary 1

principal 1

prize 1

programmes 1

prominent 1

promote 1

promoting 2

protecting 1

providing 2

replacement 1

resides 1

resolutions 1

respective 1

rights 1

s 5

security 2

significantly 1

since 2

six 1

social 3

spending 1

state 1

states 2

status 1

studies 1

success 1

successor 1

such 1

talks 1

territory 1

the 38

their 1

there 1

this 1

though 1

to 6

took 2

varying 1

voluntary 1

was 3

well 1

while 1

widespread 1

with 3

won 1

work 1

world 1