

Group B:- Big Data Analysis

Write a code in JAVA for a simple WordCount application that counts the number of occurrences of each word in a given input set using the Hadoop Map-Reduce framework on a local-standalone set-up.

Hadoop Installation Video Ref :-

<https://www.youtube.com/watch?v=O1GcLdXuYc8>

Documentation :-

<https://github.com/bhushanasati25/SPPU-TE-Practical/tree/main/6th%20Sem/Data%20Science%20%26%20Big%20Data/Hadoop%20Program>

WordCount Program :-

<https://www.youtube.com/watch?v=QfdxiXFTcak&list=PLI6DC0kKx3wt-M-Ij25U1YCKeip5RvQuD&index=2>

The screenshot displays the Hadoop web interface in a Google Chrome browser. The main window shows the 'Browse Directory' view for the path `/user/hduser/bhushanoutput`. A modal window titled 'File information - part-r-00000' is open, showing details for the file `part-r-00000`. The modal includes a 'Block information' section with a dropdown set to 'Block 0', displaying the following details:

- Block ID: 1073741832
- Block Pool ID: BP-996143458-127.0.1.1-1647935279153
- Generation Stamp: 1008
- Size: 121
- Availability:
 - iHack-PC

Below the block information, the 'File contents' section shows the following text:

```
Association's 1
College 1
District 1
Education 1
I 1
India 2
Pune 2
USA2
```

The background interface shows a table of files with columns for 'Block Size', 'Name', and 'Actions'. The file `part-r-00000` is highlighted, and the 'Previous' button is active.

Activities Google Chrome Tue Mar 22 2:06:45 PM

localhost:50070/explorer.html#/user/hduser/bhushanoutput

Hadoop Overview Datanodes

Browse Directory

/user/hduser/bhushanoutput

Show 25 entries

Permission	Owner
-rw-r--r--	hduser
-rw-r--r--	hduser

Showing 1 to 2 of 2 entries

Hadoop, 2017.

File information - part-r-00000

Download Head the file (first 32K) Tail the file (last 32K)

Block information -- Block 0

Block ID: 1073741832
Block Pool ID: BP-996143458-127.0.1.1-1647935279153
Generation Stamp: 1008
Size: 121
Availability:

- iHack-PC

File contents

```
Association's 1
College 1
District 1
Education 1
I 1
India 2
Pune 2
USA2
```

Activities Google Chrome Tue Mar 22 2:06:53 PM

localhost:50070/explorer.html#/user/hduser/bhushanoutput

Hadoop Overview Datanodes Datanode Volume Failures Snapshot Startup Progress Utilities

Browse Directory

/user/hduser/bhushanoutput Go!

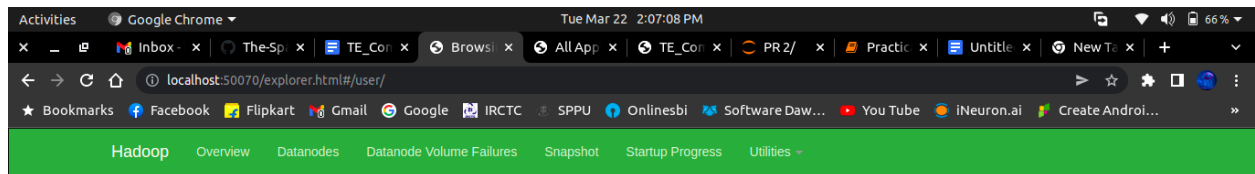
Show 25 entries Search:

Permission	Owner	Group	Size	Last Modified	Replication	Block Size	Name
-rw-r--r--	hduser	supergroup	0 B	Mar 22 13:29	1	128 MB	_SUCCESS
-rw-r--r--	hduser	supergroup	121 B	Mar 22 13:29	1	128 MB	part-r-00000

Showing 1 to 2 of 2 entries

Previous 1 Next

Hadoop, 2017.



Browse Directory

Search: Go!

Show entries Search:

<input type="checkbox"/>	Permission	Owner	Group	Size	Last Modified	Replication	Block Size	Name	
<input type="checkbox"/>	drwxr-xr-x	hduser	supergroup	0 B	Mar 22 13:25	0	0 B	bhushan	
<input type="checkbox"/>	drwxr-xr-x	hduser	supergroup	0 B	Mar 22 13:28	0	0 B	hduser	
<input type="checkbox"/>	drwxr-xr-x	hduser	supergroup	0 B	Mar 22 13:26	0	0 B	input	

Showing 1 to 3 of 3 entries

Previous **1** Next

Hadoop, 2017.

Activities Google Chrome Tue Mar 22 2:07:17 PM

localhost:8088/cluster

All Applications

Cluster Metrics

Apps Submitted	Apps Pending	Apps Running	Apps Completed	Containers Running	Memory Used	Memory Total	Memory Reserved	V-Cores Used	V-Cores Total	V-Cores Reserved
1	0	0	1	0	0 B	8 GB	0	0	0	0

Cluster Nodes Metrics

Active Nodes	Decommissioning Nodes	Decommissioned Nodes	Lost Nodes	Unhealthy Nodes	Rebooted Nodes	Shutdown Nodes
1	0	0	0	0	0	0

Scheduler Metrics

Capacity Scheduler	Scheduler Type	Scheduling Resource Type	Minimum Allocation	Maximum Allocation	Maximum Cluster Application Priority
1	MEMORY <td>memory 1024, vCores 1+</td> <td>memory 8192, vCores 1+</td> <td>0</td> <td></td>	memory 1024, vCores 1+	memory 8192, vCores 1+	0	

Showing 1 to 1 of 1 entries

ID	User	Name	Application Type	Queue	Priority	Start Time	Finish Time	Status	Final Status	Running Containers	Allocated CPU V-Cores	Allocated Memory MB	Reserved CPU V-Cores	Reserved Memory MB	% of Queue	% of Cluster	Progress	Tracking UI	Blacklisted Nodes
application_1647935230954_0001	hduser	word count	MAPREDUCE	default	0	Tue Mar 22 13:28:42	Tue Mar 22 13:29:03	FINISHED	SUCCEEDED	N/A	N/A	N/A	N/A	N/A	0.0	0.0			0

Showing 1 to 1 of 1 entries