BIG DATA

SECTION D

Fall'2023

Yogya Sharma

ys5250
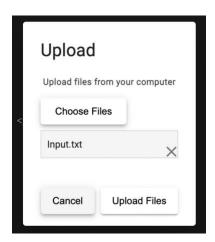
GHW#1

```
Last login: Fri Sep 29 22:13:15 2023 from 35.235.244.34
ys5250_nyu_edu@nyu-dataproc-m:~$ hostname
nyu-dataproc-m
ys5250_nyu_edu@nyu-dataproc-m:~$ uname -a
Linux nyu-dataproc-m 5.10.0-0.bpo.12-amd64 #1 SMP Debian 5.10.103-1~bpo10+1 (2022-03-08) x86_64 GNU/Linux
ys5250_nyu_edu@nyu-dataproc-m:~$ whoami
ys5250_nyu_edu
ys5250_nyu_edu@nyu-dataproc-m:~$ pwd
/home/ys5250_nyu_edu
ys5250_nyu_edu@nyu-dataproc-m:~$ hdfs dfs -mkdir /user/yogyasharma
ys5250_nyu_edu@nyu-dataproc-m:~$ hdfs dfs -ls /user
Found 330 items
drwxr-xr-x   - sk9944_nyu_edu  hadoop              0 2023-09-07 20:18 /user/[net_Id]_nyu_edu
drwxr-xr-x   - qd2107_nyu_edu  hadoop              0 2023-09-07 20:23 /user/1d2107_nyu_edu
drwxr-xr-x   - sa7495_nyu_edu  hadoop              0 2023-09-29 17:03 /user/Shivek
drwxr-xr-x   - adm209_nyu_edu  hadoop              0 2023-09-28 10:42 /user/YOURNETID_nyu_edu
drwx------   - aa10350_nyu_edu aa10350_nyu_edu     0 2023-09-28 19:59 /user/aa10350_nyu_edu
drwx------   - ab10465_nyu_edu ab10465_nyu_edu     0 2023-09-14 22:27 /user/ab10465_nyu_edu
drwx------   - adm209_nyu_edu  adm209_nyu_edu      0 2023-09-09 00:43 /user/adm209_nyu_edu
drwx------   - ag8172_nyu_edu  ag8172_nyu_edu      0 2023-09-14 22:34 /user/ag8172_nyu_edu
drwx------   - ag9489_nyu_edu  ag9489_nyu_edu      0 2023-09-18 08:27 /user/ag9489_nyu_edu
drwxr-xr-x   - ag9544_nyu_edu  hadoop              0 2023-09-29 20:32 /user/ag9544
drwx------   - ag9544_nyu_edu  ag9544_nyu_edu      0 2023-09-28 20:17 /user/ag9544_nyu_edu
drwx------   - ahg342_nyu_edu  ahg342_nyu_edu      0 2023-09-28 22:42 /user/ahg342_nyu_edu
drwx------   - ajk8815_nyu_edu ajk8815_nyu_edu     0 2023-09-28 18:31 /user/ajk8815_nyu_edu
drwx------   - ak10514_nyu_edu ak10514_nyu_edu     0 2023-09-28 20:00 /user/ak10514_nyu_edu
drwx------   - ak8827_nyu_edu  ak8827_nyu_edu      0 2023-09-29 20:53 /user/ak8827_nyu_edu
drwx------   - al8291_nyu_edu  al8291_nyu_edu      0 2023-09-28 23:50 /user/al8291_nyu_edu
drwx------   - am10865_nyu_edu am10865_nyu_edu     0 2023-09-14 22:28 /user/am10865_nyu_edu
drwx------   - am11351_nyu_edu am11351_nyu_edu     0 2023-09-23 23:24 /user/am11351_nyu_edu
drwx------   - am13801_nyu_edu am13801_nyu_edu     0 2023-09-28 19:30 /user/am13801_nyu_edu
drwx------   - an3731_nyu_edu  an3731_nyu_edu      0 2023-09-26 01:04 /user/an3731_nyu_edu
drwx------   - an4207_nyu_edu  an4207_nyu_edu      0 2023-09-14 22:49 /user/an4207_nyu_edu
drwxr-xr-x   - ar7996_nyu_edu  hadoop              0 2023-09-21 02:59 /user/ankit
drwx------   - ap7986_nyu_edu  ap7986_nyu_edu      0 2023-09-26 22:52 /user/ap7986_nyu_edu
drwx------   - ap7989_nyu_edu  ap7989_nyu_edu      0 2023-09-06 23:55 /user/ap7989_nyu_edu
drwx------   - ap8246_nyu_edu  ap8246_nyu_edu      0 2023-09-28 20:18 /user/ap8246_nyu_edu
drwx------   - apk9563_nyu_edu apk9563_nyu_edu     0 2023-09-23 20:58 /user/apk9563_nyu_edu
drwx------   - ar7165_nyu_edu  ar7165_nyu_edu      0 2023-09-23 16:08 /user/ar7165_nyu_edu
drwx------   - ar7996_nyu_edu  ar7996_nyu_edu      0 2023-09-21 03:13 /user/ar7996_nyu_edu
drwx------   - as14661_nyu_edu as14661_nyu_edu     0 2023-09-29 01:36 /user/as14661_nyu_edu
drwx------   - as15453_nyu_edu as15453_nyu_edu     0 2023-09-29 11:17 /user/as15453_nyu_edu
drwxr-xr-x   - as16655_nyu_edu hadoop              0 2023-09-29 21:54 /user/as16655
drwx------   - as16655_nyu_edu as16655_nyu_edu     0 2023-09-28 20:17 /user/as16655_nyu_edu
```

```
drwx------   - yc4369_nyu_edu  yc4369_nyu_edu      0 2023-09-15 22:11 /user/yc4369_nyu_edu
drwx------   - yc4547_nyu_edu  yc4547_nyu_edu      0 2023-09-27 02:17 /user/yc4547_nyu_edu
drwx------   - yc5915_nyu_edu  yc5915_nyu_edu      0 2023-09-28 22:52 /user/yc5915_nyu_edu
drwx------   - yc5928_nyu_edu  yc5928_nyu_edu      0 2023-09-29 02:45 /user/yc5928_nyu_edu
drwx------   - yc6371_nyu_edu  yc6371_nyu_edu      0 2023-09-29 18:43 /user/yc6371_nyu_edu
drwx------   - yc6380_nyu_edu  yc6380_nyu_edu      0 2023-09-27 21:10 /user/yc6380_nyu_edu
drwx------   - yh4519_nyu_edu  yh4519_nyu_edu      0 2023-09-24 19:20 /user/yh4519_nyu_edu
drwx------   - yl10228_nyu_edu yl10228_nyu_edu     0 2023-09-29 07:33 /user/yl10228_nyu_edu
drwx------   - yl11221_nyu_edu yl11221_nyu_edu     0 2023-09-23 20:48 /user/yl11221_nyu_edu
drwx------   - yl12038_nyu_edu yl12038_nyu_edu     0 2023-09-24 21:17 /user/yl12038_nyu_edu
drwx------   - yl12129_nyu_edu yl12129_nyu_edu     0 2023-09-25 01:21 /user/yl12129_nyu_edu
drwx------   - yl6211_nyu_edu  yl6211_nyu_edu      0 2023-09-25 01:40 /user/yl6211_nyu_edu
drwx------   - yl6624_nyu_edu  yl6624_nyu_edu      0 2023-09-28 20:14 /user/yl6624_nyu_edu
drwx------   - yl6644_nyu_edu  yl6644_nyu_edu      0 2023-09-29 19:03 /user/yl6644_nyu_edu
drwx------   - yl7789_nyu_edu  yl7789_nyu_edu      0 2023-09-28 06:13 /user/yl7789_nyu_edu
drwx------   - ym3144_nyu_edu  ym3144_nyu_edu      0 2023-09-14 22:42 /user/ym3144_nyu_edu
drwxr-xr-x   - ys5270_nyu_edu  hadoop              0 2023-09-29 20:37 /user/yogesh
drwxr-xr-x   - ys5250_nyu_edu  hadoop              0 2023-09-29 22:17 /user/yogyasharma
drwxr-xr-x   - ss14758_nyu_edu hadoop              0 2023-09-15 15:58 /user/your_username
drwx------   - yp2353_nyu_edu  yp2353_nyu_edu      0 2023-09-28 23:40 /user/yp2353_nyu_edu
drwx------   - ypc231_nyu_edu  ypc231_nyu_edu      0 2023-09-29 19:57 /user/ypc231_nyu_edu
drwx------   - ys5250_nyu_edu  ys5250_nyu_edu      0 2023-09-29 03:44 /user/ys5250_nyu_edu
drwx------   - ys5270_nyu_edu  ys5270_nyu_edu      0 2023-09-29 20:57 /user/ys5270_nyu_edu
drwx------   - ys5608_nyu_edu  ys5608_nyu_edu      0 2023-09-28 02:51 /user/ys5608_nyu_edu
drwx------   - yt2475_nyu_edu  yt2475_nyu_edu      0 2023-09-25 05:37 /user/yt2475_nyu_edu
drwxr-xr-x   - yva2006_nyu_edu hadoop              0 2023-09-29 22:17 /user/yva2006
drwx------   - yva2006_nyu_edu yva2006_nyu_edu     0 2023-09-29 19:57 /user/yva2006_nyu_edu
drwx------   - yw6775_nyu_edu  yw6775_nyu_edu      0 2023-09-21 21:43 /user/yw6775_nyu_edu
drwx------   - yw7112_nyu_edu  yw7112_nyu_edu      0 2023-09-28 07:19 /user/yw7112_nyu_edu
drwx------   - yy4785_nyu_edu  yy4785_nyu_edu      0 2023-09-19 16:08 /user/yy4785_nyu_edu
drwx------   - yz10317_nyu_edu yz10317_nyu_edu     0 2023-09-27 19:08 /user/yz10317_nyu_edu
drwx------   - yz10589_nyu_edu yz10589_nyu_edu     0 2023-09-28 19:30 /user/yz10589_nyu_edu
drwx------   - yz7996_nyu_edu  yz7996_nyu_edu      0 2023-09-28 02:40 /user/yz7996_nyu_edu
drwxr-xr-x   - yz8759_nyu_edu  hadoop              0 2023-09-28 18:44 /user/yz8759_nyu-edu
drwx------   - yz8759_nyu_edu  yz8759_nyu_edu      0 2023-09-28 18:10 /user/yz8759_nyu_edu
drwx------   - yz8887_nyu_edu  yz8887_nyu_edu      0 2023-09-28 03:13 /user/yz8887_nyu_edu
drwx------   - zc2398_nyu_edu  zc2398_nyu_edu      0 2023-09-29 00:02 /user/zc2398_nyu_edu
drwx------   - zc3068_nyu_edu  zc3068_nyu_edu      0 2023-09-29 02:48 /user/zc3068_nyu_edu
drwx------   - zf2100_nyu_edu  zf2100_nyu_edu      0 2023-09-29 21:21 /user/zf2100_nyu_edu
drwx------   - zg2501_nyu_edu  zg2501_nyu_edu      0 2023-09-28 20:49 /user/zg2501_nyu_edu
drwx------   - zh2692_nyu_edu  zh2692_nyu_edu      0 2023-09-27 20:01 /user/zh2692_nyu_edu
drwx------   - zl3468_nyu_edu  zl3468_nyu_edu      0 2023-09-22 15:58 /user/zl3468_nyu_edu
drwxr-xr-x   - hdfs            hadoop              0 2023-08-11 17:41 /user/zookeeper
drwx------   - zs2134_nyu_edu  zs2134_nyu_edu      0 2023-09-29 00:58 /user/zs2134_nyu_edu
drwx------   - zs2663_nyu_edu  zs2663_nyu_edu      0 2023-09-21 22:11 /user/zs2663_nyu_edu
drwx------   - zw2120_nyu_edu  zw2120_nyu_edu      0 2023-09-07 20:26 /user/zw2120_nyu_edu
drwx------   - zw2972_nyu_edu  zw2972_nyu_edu      0 2023-09-28 12:19 /user/zw2972_nyu_edu
drwx------   - zw3518_nyu_edu  zw3518_nyu_edu      0 2023-09-21 22:46 /user/zw3518_nyu_edu
drwx------   - zw3917_nyu_edu  zw3917_nyu_edu      0 2023-09-17 18:43 /user/zw3917_nyu_edu
drwxr-xr-x   - zw2972_nyu_edu  hadoop              0 2023-09-28 13:08 /user/zw_2972_nyu_edu
drwxr-xr-x   - zz4099_nyu_edu  hadoop              0 2023-09-22 19:50 /user/zz4099
drwx------   - zz4099_nyu_edu  zz4099_nyu_edu      0 2023-09-28 22:40 /user/zz4099_nyu_edu
```

```
ys5250_nyu_edu@nyu-dataproc-m:~$ hdfs dfs -mkdir /user/yogyasharma/nyu
ys5250_nyu_edu@nyu-dataproc-m:~$ hdfs dfs -ls /user/yogyasharma
Found 1 items
drwxr-xr-x   - ys5250 nyu edu hadoop              0 2023-09-29 22:18 /user/yogyasharma/nyu
```

```
ys5250_nyu_edu@nyu-dataproc-m:~$ hdfs dfs -rmr /user/yogyasharma/nyu
rmr: DEPRECATED: Please use '-rm -r' instead.
Deleted /user/yogyasharma/nyu
```

Upload

Upload files from your computer

Choose Files

Input.txt ✕

Cancel Upload Files

ys5250_nyu_edu@nyu-dataproc-m:~$ ls
Input.txt
ys5250_nyu_edu@nyu-dataproc-m:~$ hdfs dfs -ls
ys5250_nyu_edu@nyu-dataproc-m:~$ hdfs dfs -put Input.txt
ys5250_nyu_edu@nyu-dataproc-m:~$ hdfs dfs -ls
Found 1 items
-rw-r--r--   1 ys5250_nyu_edu ys5250_nyu_edu   447756 2023-09-29 22:33 Input.txt
ys5250_nyu_edu@nyu-dataproc-m:~$

ys5250_nyu_edu@nyu-dataproc-m:~$ rm -rf Input.txt
ys5250_nyu_edu@nyu-dataproc-m:~$ ls
ys5250_nyu_edu@nyu-dataproc-m:~$ hdfs dfs -ls
Found 1 items
-rw-r--r--   1 ys5250_nyu_edu ys5250_nyu_edu   447756 2023-09-29 22:33 Input.txt
ys5250_nyu_edu@nyu-dataproc-m:~$ hdfs dfs -get Input.txt
ys5250_nyu_edu@nyu-dataproc-m:~$ ls
Input.txt
ys5250_nyu_edu@nyu-dataproc-m:~$

SSH-in-browser   ⬆ UPLOAD FILE   ⬇ DOWNLOAD FILE   ⚙

ys5250_nyu_edu@nyu-dataproc-m:~$ hdfs dfs -cat Input.txt
Harry Potter And the Sorcerers Stone ALSO BY J. K. ROWLING Harry Potter and the Sorcerers Stone Year One at Hogwarts Harry Potter and the Chamber of Secrets Year Two at Hogwarts Harry Potter and the Prisoner of Azkaban Year Three at Hogwarts Harry Potter and the Goblet of Fire Year Four at Hogwarts Harry Potter and the Order of the Phoenix Year Five at Hogwarts Harry Potter and the Half-Blood Prince Year Six at Hogwarts Harry Potter and the Deathly Hallows Year Seven at Hogwarts Harry Potter and the Sorcerers Stone BY J. K. Rowling ILLUSTRATIONS BY Mary GrandPr ARTHUR A. LEVINE BOOKS AN IMPRINT OF SCHOLASTIC Press. For Jessica, who loves stories for Anne, who loved them too; and for Di, who heard this one first. Text copyright 1997 by J.K. Rowling Illustrations by Mary GrandPr copyright 1998 Warner Bros. All rights reserved. Published by Scholastic Press, a division of Scholastic Inc., Publishers since 19 20 SCHOLASTIC, SCHOLASTIC PRESS, and the LANTERN LOGO are trademarks and/or registered trademarks of Scholastic Inc. HARRY POTTER and all related characters and elements are trademarks of Warner Bros. No part of this publication may be reproduced, or stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recor ding, or otherwise, without written permission of the publisher. For information regarding permissions, write to Scholastic Inc., Attention: Permissions Department, 555 Broadway, New Y ork, NY 10012. Library of Congress Cataloging-in-Publication Data Rowling, J.K. Harry Potter and the Sorcerer's Stone / by J.K. Rowling p. cm. Summary: Rescued from the outrageous negl ect of his aunt and uncle, a young boy with a great destiny proves his worth while attending Hogwarts School of Witchcraft and Wizardry. ISBN 0-590-35340-3 [1. Fantasy Fiction. 2. Wit ches Fiction. 3. Wizards Fiction. 4. Schools Fiction. 5. England Fiction.] I. Title. PZ7.R79835Har 1998 [Fic]   dc21 97-39059 64 65 66 67 68 69 70 71 72 05 Printed in U.S.A. 10 Firs t American edition, October 1998 5 Contents ONE The Boy Who Lived 1 TWO The Vanishing Glass 18 THREE The Letters from No One 31 FOUR The Keeper of the Keys 46 FIVE Diagon Alley 61 SIX The Journey from Platform Nine and Three-quarters 88 SEVEN The Sorting Hat 113 EIGHT The Potions Master 131 Contents 6 NINE The Midnight Duel 143 TEN Halloween 163 ELEVEN Quidditch 180 TWELVE The Mirror of Erised 194 THIRTEEN Nicholas Flamel 215 FOURTEEN Norbert the Norwegian Ridgeback 228 FIFTEEN The Forbidden Forest 242 SIXTEEN Through the Trapd oor 262 SEVENTEEN The Man with Two Faces 288 Harry Potter And the Sorcerers Stone C H A P T E R O N E 1 THE BOY WHO LIVED r. and Mrs. Dursley, of number four, Privet Drive, were pr oud to say that they were perfectly normal, thank you very much. They were the last people youd expect to be involved in anything strange or mysterious, because they just didnt hold wi th such nonsense. Mr. Dursley was the director of a firm called Grunnings, which made drills. He was a big, beefy man with hardly any neck, although he did have a very large mustache. Mrs. Dursley was thin and blonde and had nearly twice the usual amount of neck, which came in very useful as she spent so much of her time craning over garden fences, spying on the nei ghbors. The Dursleys had a small son called Dudley and in their opinion there was no finer boy anywhere. The Dursleys had everything they wanted, but they also had a secret, and their greatest fear was that somebody would discover it. N CHAPTER ONE 2 They didnt think they could bear it if anyone found out about the Potters. Mrs. Potter was Mrs. Dursleys sister, bu t they hadnt met for several years; in fact, Mrs. Dursley pretended she didnt have a sister, because her sister and her good-for-nothing husband were as unDursleyish as it was possible to be. The Dursleys shuddered to think what the neighbors would say if the Potters arrived in the street. The Dursleys knew that the Potters had a small son, too, but they had never e ven seen him. This boy was another good reason for keeping the Potters away; they didnt want Dudley mixing with a child like that. When Mr. and Mrs. Dursley woke up on the dull, gray T uesday our story starts, there was nothing about the cloudy sky outside to suggest that strange and mysterious things would soon be happening all over the country. Mr. Dursley hummed a s he picked out his most boring tie for work, and Mrs. Dursley gossiped away happily as she wrestled a screaming Dudley into his high chair. None of them noticed a large, tawny owl flu tter past the window. At half past eight, Mr. Dursley picked up his briefcase, pecked Mrs. Dursley on the cheek, and tried to kiss Dudley good-bye but missed, because Dudley was now ha ving a tantrum and throwing his cereal at the walls. Little tyke, chortled Mr. Dursley as he left the house. He got into his car and backed out of number fours drive. It was on the cor ner of the street that he noticed the first sign of something peculiar a cat reading a map. For a second, Mr. Dursley didnt realize what he had seen then he jerked his head around to look again. There was a tabby cat standing on the corner THE BOY WHO LIVED 3 of Privet Drive, but there wasnt a map in sight. What could he have been thinking of? It must have been a trick of the light. Mr. Dursley blinked and stared at the cat. It stared back. As Mr. Dursley drove around the corner and up the road, he watched the cat in his mirror. It was now re ading the sign that said Privet Drive no, looking at the sign; cats couldnt read maps or signs. Mr. Dursley gave himself a little shake and put the cat out of his mind. As he drove to ward town he thought of nothing except a large order of drills he was hoping to get that day. But on the edge of town, drills were driven out of his mind by something else. As he sat i n the usual morning traffic jam, he couldnt help noticing that there seemed to be a lot of strangely dressed people about. People in cloaks. Mr. Dursley couldnt bear people who dressed in funny clothes the getups you saw on young people! He supposed this was some stupid new fashion. He drummed his fingers on the steering wheel and his eyes fell on a huddle of these weirdos standing quite close by. They were whispering excitedly together. Mr. Dursley was enraged to see that a couple of them werent young at all; why, that man had to be older than he was, and wearing an emerald-green cloak! The nerve of him! But then it struck Mr. Dursley that this was probably some silly stunt these people were obviously collecting for somethi ng . . . yes, that would be it. The traffic moved on and a few minutes later, Mr. Dursley arrived in the Grunnings parking lot, his mind back on drills. Mr. Dursley always sat with his back to the window in his office on the ninth floor. If he hadnt, he might have found it harder to concentrate on drills that morning. He didnt see the owls swoop- CHAPTER ONE 4 ing past in broad daylight, though people down in the street did; they pointed and gazed open-mouthed as owl after owl sped overhead. Most of them had never seen an owl even at nighttime. Mr. Dursley, however, had a perfectly normal, owl-free morning. He yelled at five different people. He made several important telephone calls and shouted a bit more. He was in a very good mood until lunchtime, when he thought hed stretch his legs and walk across the road to buy himself a bun from the bakery. Hed forgotten all about the people in cloaks until he pas sed a group of them next to the bakers. He eyed them angrily as he passed. He didnt know why, but they made him uneasy. This bunch were whispering excitedly, too, and he couldnt see a single collecting tin. It was on his way back past them, clutching a large doughnut in a bag, that he caught a few words of what they were saying. The Potters, thats right, thats what I heard yes, their son, Harry Mr. Dursley stopped dead. Fear flooded him. He looked back at the whisperers as if he wanted to say something to them, but thought better of it. He das hed back across the road, hurried up to his office, snapped at his secretary not to disturb him, seized his telephone, and had almost finished dialing his home number when he changed h is mind. He put the receiver back down and stroked his mustache, thinking . . . no, he was being stupid. Potter wasnt such an unusual name. He was sure there were lots of people called Potter who had a son called Harry. Come to think of it, he wasnt even sure his nephew was called Harry. Hed never even seen the boy. It THE BOY WHO LIVED 5 might have been Harvey. O r Harold. There was no point in worrying Mrs. Dursley; she always got so upset at any mention of her sister. He didnt blame her if hed had a sister like that . . . but all the same, t hose people in cloaks . . . He found it a lot harder to concentrate on drills that afternoon and when he left the building at five oclock, he was still so worried that he walked straig ht into someone just outside the door. Sorry, he grunted, as the tiny old man stumbled and almost fell. It was a few seconds before Mr. Dursley realized that the man was wearing a viol et cloak. He didnt seem at all upset at being almost knocked to the ground. On the contrary, his face split into a wide smile and he said in a squeaky voice that made passersby stare,

ys5250_nyu_edu@nyu-dataproc-m:~$
ys5250_nyu_edu@nyu-dataproc-m:~$
ys5250_nyu_edu@nyu-dataproc-m:~$
ys5250_nyu_edu@nyu-dataproc-m:~$ pwd
/home/ys5250_nyu_edu
ys5250_nyu_edu@nyu-dataproc-m:~$

Transferred 1 item

Input.txt   Directory: /home/ys5250_nyu_edu/Inp... ✓

Learnings:

During the execution of Linux and HDFS commands, I acquired practical experience with Hadoop's command-line interface. This experience enhanced my understanding of interactions with Hadoop clusters. I gained knowledge on effectively navigating the distributed file system, including tasks such as managing files and directories, as well as executing data-related operations.