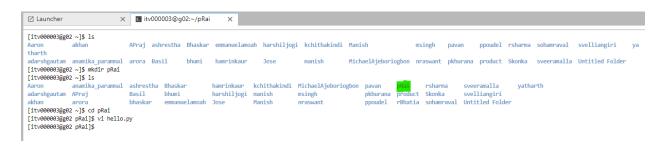# Assignment 1

Introduction

BAM-1043-01 Assignment
C#: c0932089_Assignment1
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Date: January 26, 2024

1. **Create a directory by your first & last name.**

2. **Open vim**
   a. Write a Python file and save it with .py extension
   b. Execute your Python code.

3. **Navigate the Hadoop directory using $hdfs fs or $hadoop dfs command.**

```
...py
[itv000003@g02 pRai]$ hdfs dfs -ls
Found 8 items
drwxr-xr-x   - itv000003 supergroup          0 2024-01-22 11:08 .sparkStaging
drwxr-xr-x   - itv000003 supergroup          0 2024-01-25 21:36 akhan
drwxr-xr-x   - itv000003 supergroup          0 2024-01-26 15:04 harshiljogi
drwxr-xr-x   - itv000003 supergroup          0 2024-01-26 15:01 kchithakindi
drwxr-xr-x   - itv000003 supergroup          0 2024-01-26 14:56 msingh_hadoop
drwxr-xr-x   - itv000003 supergroup          0 2024-01-26 14:55 pavan_hadoop
drwxr-xr-x   - itv000003 supergroup          0 2024-01-26 15:04 sohamraval
drwxr-xr-x   - itv000003 supergroup          0 2024-01-26 14:58 svelliangiri
[itv000003@g02 pRai]$
```

4. Check for the file permissions.

```
...py
[itv000003@g02 pRai]$ hdfs dfs -ls
Found 8 items
drwxr-xr-x   - itv000003 supergroup          0 2024-01-22 11:08 .sparkStaging
drwxr-xr-x   - itv000003 supergroup          0 2024-01-25 21:36 akhan
drwxr-xr-x   - itv000003 supergroup          0 2024-01-26 15:04 harshiljogi
drwxr-xr-x   - itv000003 supergroup          0 2024-01-26 15:01 kchithakindi
drwxr-xr-x   - itv000003 supergroup          0 2024-01-26 14:56 msingh_hadoop
drwxr-xr-x   - itv000003 supergroup          0 2024-01-26 14:55 pavan_hadoop
drwxr-xr-x   - itv000003 supergroup          0 2024-01-26 15:04 sohamraval
drwxr-xr-x   - itv000003 supergroup          0 2024-01-26 14:58 svelliangiri
[itv000003@g02 pRai]$ []
```

5. Suppose there is file of size 514 MB stored in HDFS (Hadoop 2.x) using default block size configuration and default replication factor:

    a. How many blocks will be created in total?
    Ans: 5 blocks will be created.

    b. What will be the size of each block?
    Ans: 4 blocks of 1*128 MB and 1 block of 1*2 MB