Choose 5 HDFS file system commands. (20 marks)

For each command provide a description of the command and run the command on the DataProc master node. Capture a screenshot of the output from running the command (4 marks each) (Please note that these must be file system HDFS commands, so something like "hadoop version" does not count)

Hadoop fs -mkdir

The hadoop mkdir command is used to create a new empty directory at the specified path.

```
themrzippers@cluster-ab8f-m:~$ hadoop fs -mkdir /lab01
themrzippers@cluster-ab8f-m:~$
```

Hadoop fs -touch

The touch command is used to update the access and modification times listed on a file at the given path. If the file does not exist it will create a new zero length file at that destination

```
themrzippers@cluster-ab8f-m:~$ hadoop fs -touch /lab01.txt
themrzippers@cluster-ab8f-m:~$
```

Hadoop fs -ls

Used on a directory ls will return all children in that directory. For a file it returns the stats on the file.

```
themrzippers@cluster-ab8f-m:~$ hadoop fs -ls /
Found 5 items
drwxr-xr-x   - themrzippers hadoop          0 2025-01-17 16:28 /lab01
-rw-r--r--   2 themrzippers hadoop          0 2025-01-17 16:31 /lab01.txt
drwxrwxrwt   - hdfs         hadoop          0 2025-01-17 16:22 /tmp
drwxrwxrwt   - hdfs         hadoop          0 2025-01-17 16:22 /user
drwxrwxrwt   - hdfs         hadoop          0 2025-01-17 16:22 /var
themrzippers@cluster-ab8f-m:~$
```

hadoop fs -mv

The mc command is used to move a file from one source to a destination. It can also be used to rename a file like in the example below.

```
themrzippers@cluster-ab8f-m:~$ hadoop fs -mv /lab01.txt /lab01-rename.txt
```

```
themrzippers@cluster-ab8f-m:~$ hadoop fs -ls /
Found 5 items
drwxr-xr-x   - themrzippers hadoop          0 2025-01-17 16:28 /lab01
-rw-r--r--   2 themrzippers hadoop          0 2025-01-17 16:31 /lab01-rename.txt
drwxrwxrwt   - hdfs         hadoop          0 2025-01-17 16:22 /tmp
drwxrwxrwt   - hdfs         hadoop          0 2025-01-17 16:22 /user
drwxrwxrwt   - hdfs         hadoop          0 2025-01-17 16:22 /var
```

hadoop fs - rm

The rm command deletes the specified file. If enabled it will move it to a trash directory rather than deleting. Arguments can be given to modify how the file is deleted or what diagnostic data/ information is output

```
themrzippers@cluster-ab8f-m:~$ hadoop fs -rm /lab01-rename.txt
Deleted /lab01-rename.txt
themrzippers@cluster-ab8f-m:~$ hadoop fs -ls /
Found 4 items
drwxr-xr-x   - themrzippers hadoop          0 2025-01-17 16:28 /lab01
drwxrwxrwt   - hdfs         hadoop          0 2025-01-17 16:22 /tmp
drwxrwxrwt   - hdfs         hadoop          0 2025-01-17 16:22 /user
drwxrwxrwt   - hdfs         hadoop          0 2025-01-17 16:22 /var
```