# MaprFS

Useful Hadoop FS commands:

1. ls - list contents of a directory

   ```
   hadoop fs -ls <path>
   hadoop fs -ls /user/xyz
   ```

2. cat - print contents of a file

   ```
   hadoop fs -cat <path>
   hadoop fs -cat /user/xyz/file.txt
   ```

3. mkdir - creates a directory

   ```
   hadoop fs -mkdir <path>
   hadoop fs -mkdir /user/xyz/subdir
   ```

4. rm - remove a file

   ```
   hadoop fs -rm <path>
   hadoop fs -rm /user/xyz/file.txt
   ```

5. chmod - changes permissions of a file

   ```
   hadoop fs -chmod <mode> <path>
   hadoop fs -chmod 640 /user/xyz/file.txt
   hadoop fs -chmod o+r /user/xyz/file.txt
   ```

6. chown - change owner of a file

   ```
   hadoop fs -chown <owner>:<group> <path>
   hadoop fs -chown xyz:xyz /user/xyz/file.txt
   ```

7. cp - copy a file

   ```
   hadoop fs -cp <source> <target>
   hadoop fs -cp /user/xyz/file /user/xyz/file.copy
   ```

8. mv - move a file

   ```
   hadoop fs -mv <source> <target>
   hadoop fs -mv /user/xyz/file /user/xyz/file.new
   ```

9. put - copy a file from local path into HDFS

   ```
   hadoop fs -put <local_path> <hdfs_path>
   hadoop fs -put file.txt /user/xyz
   ```

10. get - copy a file from HDFS to local path

```
hadoop fs -get <hdfs_path> <local_path>
hadoop fs -get /user/xyz/file.txt .
```

11. touchz - create an empty file

```
hadoop fs -touchz <path>
hadoop fs -touchz /usr/xyz/file.txt
```

12. appendToFile - append local file contents to file on hdfs

```
hadoop fs -appendToFile <local_path> <hdfs_path>
hadoop fs -appendToFile abc.txt /user/xyz/file.txt
```

## Tasks

1. Create files on distributed storage with permissions:

| path | user | group | permissions |
|---|---|---|---|
| /user/<username>/inputs | <login> | <login> | 755 |
| /user/<username>/outputs | <login> | <login> | 755 |
| /user/<username>/alien | <login> | <login> | 755 |

2. put files 'loremipsum' and 'transfers' to /user/<username>/inputs

3. put file with any content into your directory, and ask a colleague to read it

4. change permissions of the file so that nobody can read it, and ask a colleague to read it again