1)Hadoop setup in docker

2)Create Delete a file in Docker.

```
docker-compose up -d
docker exec -it namenode bash
```

Step 1: Create a File in HDFS

You can create a file in HDFS using the `hadoop fs -touchz` command. This command creates an empty file in the specified path.

```
hadoop fs -touchz /user/student/example.txt
```

Step 2: Verify the File Creation

You can verify that the file has been created by listing the contents of the directory:

```
hadoop fs -ls /user/student
```

Step 3: Delete the File

To delete the file, you can use the `hadoop fs -rm` command:

```
hadoop fs -rm /user/your_username/example.txt
```

This command will delete the `example.txt` file from your home directory in HDFS.

Verify Deletion

You can verify that the file has been deleted by listing the contents of the directory again:

```
hadoop fs -ls /user/your_username
```

3) JAVA CODE

Install HIVE

docker pull apache/hive:4.0.0-alpha-2

set HIVE_VERSION=4.0.0-alpha-2

docker run -d -p 10000:10000 -p 10002:10002 --env SERVICE_NAME=hiveserver2 --name
hive4 apache/hive:%HIVE_VERSION%

docker exec -it hive4 beeline -u 'jdbc:hive2://localhost:10000/'

0: jdbc:hive2://localhost:10000/> show tables;

CREATE DATABASE IF NOT EXISTS my_database;

USE my_database;

CREATE TABLE IF NOT EXISTS my_table (
   id INT,
   name STRING
);

INSERT INTO my_table VALUES
(1, 'John'),
(2, 'Alice'),
(3, 'Bob');

```sql
INSERT INTO my_table VALUES
(1, 'John'),
(2, 'Alice'),
(3, 'Bob');

SELECT * FROM my_table;
```

Install Hbase

```
docker pull harisekhon/hbase

docker run -d --name=hbase -p 16000:16000 -p 16010:16010 -p 16020:16020 -p 16030:16030
harisekhon/hbase

docker exec -it hbase hbase shell

hbase(main):001:0> create 'student', 'info'

put 'student', '1', 'info:name', 'John'
put 'student', '1', 'info:age', '25'
put 'student', '2', 'info:name', 'Alice'
put 'student', '2', 'info:age', '28'
put 'student', '3', 'info:name', 'Bob'
put 'student', '3', 'info:age', '22'

scan 'student'

exit
```