1. javac -classpath "\$(yarn classpath)" -d . OrganizeMonthsMapper.java

```
[lam923@login-2-1 ~]$ javac -classpath "$(yarn classpath)" -d . OrganizeMonthsMapper.java
```

2. javac -classpath "\$(yarn classpath)" -d . OrganizeMonthsReducer.java

```
[lam923@login-2-1 ~]$ javac -classpath "$(yarn classpath)" -d . OrganizeMonthsReducer.java
```

3. javac -classpath "\$(yarn classpath)":. -d . OrganizeMonths.java

```
[lam923@login-2-1 ~]$ javac -classpath "$(yarn classpath)":. -d . OrganizeMonths.java
Note: OrganizeMonths.java uses or overrides a deprecated API.
Note: Recompile with -Xlint:deprecation for details.
```

4. jar -cvf OrganizeMonths.jar *.class

```
[lam923@login-2-1 ~]$ jar -cvf OrganizeMonths.jar *.class
added manifest
adding: Clean.class(in = 1190) (out= 691)(deflated 41%)
adding: CleanMapper.class(in = 2721) (out= 1325)(deflated 51%)
adding: CleanReducer.class(in = 1762) (out= 734)(deflated 58%)
adding: CountRecs.class(in = 1257) (out= 719)(deflated 42%)
adding: CountRecsMapper.class(in = 1554) (out= 601)(deflated 61%)
adding: CountRecsReducer.class(in = 1602) (out= 667)(deflated 58%)
adding: CountTotalCases.class(in = 1288) (out= 730)(deflated 43%)
adding: CountTotalCasesMapper.class(in = 1955) (out= 792)(deflated 59%)
adding: CountTotalCasesReducer.class(in = 1614) (out= 672)(deflated 58%)
adding: MaxTemperature.class(in = 1452) (out= 822)(deflated 43%)
adding: MaxTemperatureMapper.class(in = 1876) (out= 805)(deflated 57%)
adding: MaxTemperatureReducer.class(in = 1687) (out= 714)(deflated 57%)
adding: NhbdCount.class(in = 1272) (out= 728)(deflated 42%)
adding: NhbdCountMapper.class(in = 2275) (out= 965)(deflated 57%)
adding: NhbdCountReducer.class(in = 1602) (out= 667)(deflated 58%)
adding: OrganizeMonths.class(in = 1282) (out= 727)(deflated 43%)
adding: OrganizeMonthsMapper.class(in = 2010) (out= 806)(deflated 59%)
adding: OrganizeMonthsReducer.class(in = 1851) (out= 787)(deflated 57%)
adding: WordCount.class(in = 1257) (out= 722)(deflated 42%)
adding: WordCountMapper.class(in = 1927) (out= 795)(deflated 58%)
adding: WordCountReducer.class(in = 1602) (out= 667)(deflated 58%)
```

5. hdfs dfs -mkdir OrganizeMonthsOutput

```
[lam923@login-2-1 ~]$ hdfs dfs -mkdir OrganizeMonthsOutput
```

6. hdfs dfs -put clean output OrganizeMonthsOutput

```
[lam923@login-2-1 ~]$ hdfs dfs -put clean_output OrganizeMonthsOutput
```

7. hadoop jar OrganizeMonths.jar OrganizeMonths
/user/lam923/OrganizeMonthsOutput/clean_output/part-r-00000
/user/lam923/OrganizeMonthsOutput/OrganizeMonths

```
[lam923@login-2-1 ~]$ hadoop jar OrganizeMonths.jar OrganizeMonths /user/lam923/OrganizeMonthsOutput/clean]
_output/part-r-00000 /user/lam923/OrganizeMonthsOutput/OrganizeMonths
20/12/02 00:59:14 WARN mapreduce.JobResourceUploader: Hadoop command-line option parsing not performed. Im
plement the Tool interface and execute your application with ToolRunner to remedy this.
20/12/02 00:59:14 INFO input.FileInputFormat: Total input paths to process: 1
20/12/02 00:59:15 INFO mapreduce.JobSubmitter: number of splits:1
20/12/02 00:59:15 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1604346392376_7077
20/12/02 00:59:15 INFO impl.YarnClientImpl: Submitted application application_1604346392376_7077
20/12/02 00:59:15 INFO mapreduce.Job: The url to track the job: http://babar.es.its.nyu.edu:8088/proxy/app
lication_1604346392376_7077/
20/12/02 00:59:15 INFO mapreduce.Job: Running job: job_1604346392376_7077
20/12/02 00:59:19 INFO mapreduce.Job: Map job_1604346392376_7077 running in uber mode: false
20/12/02 00:59:24 INFO mapreduce.Job: map 0% reduce 0%
20/12/02 00:59:24 INFO mapreduce.Job: map 100% reduce 0%
20/12/02 00:59:30 INFO mapreduce.Job: map 100% reduce 100%
20/12/02 00:59:31 INFO mapreduce.Job: Job job_1604346392376_7077 completed successfully
20/12/02 00:59:31 INFO mapreduce.Job: Counters: 49
```

8. hdfs dfs -cat /user/lam923/OrganizeMonthsOutput/OrganizeMonths/part-r-00000

```
[[lam923@login-2-1 ~]$ hdfs dfs -cat /user/lam923/OrganizeMonthsOutput/OrganizeMonths/part-r-00000
1, AL , Filler,0
1, AR , Filler,0
1, AZ , Filler,1
1, CA , Filler,3
1, CO , Filler,0
1, CT , Filler,0
1, DE , Filler,0
```

9. hdfs dfs -get /user/lam923/OrganizeMonthsOutput/OrganizeMonths

[[lam923@login-2-1 ~]\$ hdfs dfs -get /user/lam923/OrganizeMonthsOutput/OrganizeMonths