Task1:

Find the number of unique listeners in the data set.

Wrote a MR Program and exported to Task1.jar

```
acadgıld@localhost ~]$ hadoop jar taskl.jar /user/musıcdata.txt /taskl_output
.8/11/25_23:05:07 WARN util.NativeCodeLoader: <mark>Unable to</mark> load native-hadoop libra
applicable
.8/11/25 23:05:17 INFO client.RMProxy: Connecting to ResourceManager at localhos
.8/11/25 23:05:31 WARN mapreduce.JobResourceUploader: Hadoop command-line option
execute your application with ToolRunner to remedy this.
.8/11/25 23:05:40 INFO input.FileInputFormat: Total input paths to process : 1
.8/11/25 23:05:43 INFO mapreduce.JobSubmitter: number of splits:1
.8/11/25 23:05:47 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_15.8/11/25 23:05:58 INFO impl.YarnClientImpl: Submitted application application_15.8/11/25 23:06:04 INFO mapreduce.Job: The url to track the job: <a href="http://localhost">http://localhost</a>
<u>.8/11/25</u> 23:06:04 INFO mapreduce.Job: Running job: job_1543166673466_0001
.8/11/25 23:09:39 INFO mapreduce.Job: Job job_1543166673466_0001 running in uber
                                                       map 0% reduce 0%
.8/11/25 23:09:39 INFO mapreduce.Job:
                                                       map 100% reduce 0%
.8/11/25 23:12:17 INFO mapreduce.Job:
                                                       map 100% reduce 33%
.8/11/25 23:14:29 INFO mapreduce.Job:
.8/11/25 23:14:34 INFO mapreduce.Job:
                                                       map 100% reduce 100%
```

Output:

```
-rw-r--r-- 1 acadgild supergroup 0 2018-11-25 23:14 /task1_output/_SU
-rw-r--r-- 1 acadgild supergroup 27 2018-11-25 23:14 /task1_output/par
[acadgild@localhost ~]$ hadoop fs -cat /task1_output/part-r-00000
18/11/25 23:17:32 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
applicable
111113 1
111115 2
111117 1
[acadgild@localhost ~]$
```

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Solution: Identified the unique user's ID along with their occurances,

Total Unique Users = 3

Task:2

What are the number of times a song was heard fully.

Wrote a MR Program and exported to task2.jar

```
[acadgild@localhost ~]$ hadoop jar task2.jar /user/musicdata.txt /task2_output
18/11/25 23:47:54 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
y for your platform... using builtin-java classes where applicable
18/11/25 23:48:03 INFO client.RMProxy: Connecting to ResourceManager at localhos
1/127.0.0.1:8032
18/11/25 23:48:09 WARN mapreduce.JobResourceUploader: Hadoop command-line option
parsing not performed. Implement the Tool interface and execute your application
n with ToolRunner to remedy this.
18/11/25 23:48:11 INFO input.FileInputFormat: Total input paths to process : 1
18/11/25 23:48:12 INFO mapreduce.JobSubmitter: number of splits:1
18/11/25 23:48:14 INFO mapreduce.JobSubmitter: Submitting tokens for job: job 15
43166673466 0002
18/11/25 23:48:15 INFO impl.YarnClientImpl: Submitted application application 15
43166673466 0002
18/11/25 23:48:17 INFO mapreduce.Job: The url to track the job: http://localhost
:8088/proxy/application 1543166673466 0002/
18/11/25 23:48:17 INFO mapreduce.Job: Running job: job_1543166673466_0002
18/11/25 23:49:14 INFO mapreduce.Job: Job job 1543166673466 0002 running in uber
```

Output:

```
[acadgild@localhost ~]$ hadoop fs -ls /task2_output
18/11/26 00:16:34 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
applicable
Found 3 items
               1 acadgild supergroup
                                                       0 2018-11-25 23:52 /task2_output/_SU
- rw - r - - r - -
                                                      6 2018-11-25 23:52 /task2_output/par
                1 acadgild supergroup
- rw- r- - r- -
                                                      12 2018-11-25 23:52 /task2 output/par
              1 acadgild supergroup
[acadgild@localhost ~]$ hadoop fs -cat /task2_output/part-r-00000
18/11/26 00:19:17 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
applicable
222
[acadgild@localhost ~]$ hadoop fs -cat /task2_output/part-r-00001
18/11/26 00:20:10 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
applicable
223
225
[acadgild@localhost ~]$
baXterm by subscribing to the professional edition here: https://mobaxterm.mobatek.net
```

Task:3

What are the number of times a song was heard fully.

```
[acadgild@localhost ~]$ hadoop jar task3.jar /user/musicdata.txt /task3_output
18/11/26 00:27:39 WARN util.NativeCodeLoader: <mark>Unable to</mark> load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
18/11/26 00:27:48 INFO client.RMProxy: Connecting to ResourceManager at localhos
t/127.0.0.1:8032
18/11/26 00:27:54 WARN mapreduce.JobResourceUploader: Hadoop command-line option
parsing not performed. Implement the Tool interface and execute your applicatio
n with ToolRunner to remedy this.
18/11/26 00:27:57 INFO input.FileInputFormat: Total input paths to process : 1
18/11/26 00:27:58 INFO mapreduce.JobSubmitter: number of splits:1
18/11/26 00:27:59 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_15
43166673466 0003
18/11/26 00:28:01 INFO impl.YarnClientImpl: Submitted application application 15
43166673466 0003
18/11/26 00:28:02 INFO mapreduce.Job: The url to track the job: <u>http://localhost</u>
:8088/proxy/application 1543166673466 0003/
18/11/26 00:28:02 INFO mapreduce.Job: Running job: job_1543166673466_0003
18/11/26 00:29:05 INFO mapreduce.Job: Job job_1543166673466_0003 running in uber
mode : false
18/11/26 00:29:06 INFO mapreduce.Job: map 0% reduce 0%
18/11/26 00:29:51 INFO mapreduce.Job:
                                              map 100% reduce 0%
                                              map 100% reduce 33%
18/11/26 00:31:17 INFO mapreduce.Job:
18/11/26 00:31:18 INFO mapreduce.Job: map 100% reduce 67%
```

Output:

```
[acadgild@localhost ~]$ hadoop fs -ls /task3_output
18/11/26 00:33:43 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable Found 3 items
-rw-r--r-- 1 acadgild supergroup
                                                0 2018-11-26 00:31 /task3 output/ SU
CCESS
              1 acadgild supergroup
                                                6 2018-11-26 00:31 /task3_output/par
- rw- r-- r--
t-r-00000
              1 acadgild supergroup
                                               12 2018-11-26 00:31 /task3 output/par
- rw- r- - r- -
t-r-00001
[acadgild@localhost ~]$ hadoop fs -cat /task3_output/part-r-00000
18/11/26 00:34:42 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
[acadgild@localhost ~]$ hadoop fs -cat /task3_output/part-r-00001
18/11/26 00:35:17 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
223
        1
225
        Θ
[acadgild@localhost ~]$
```