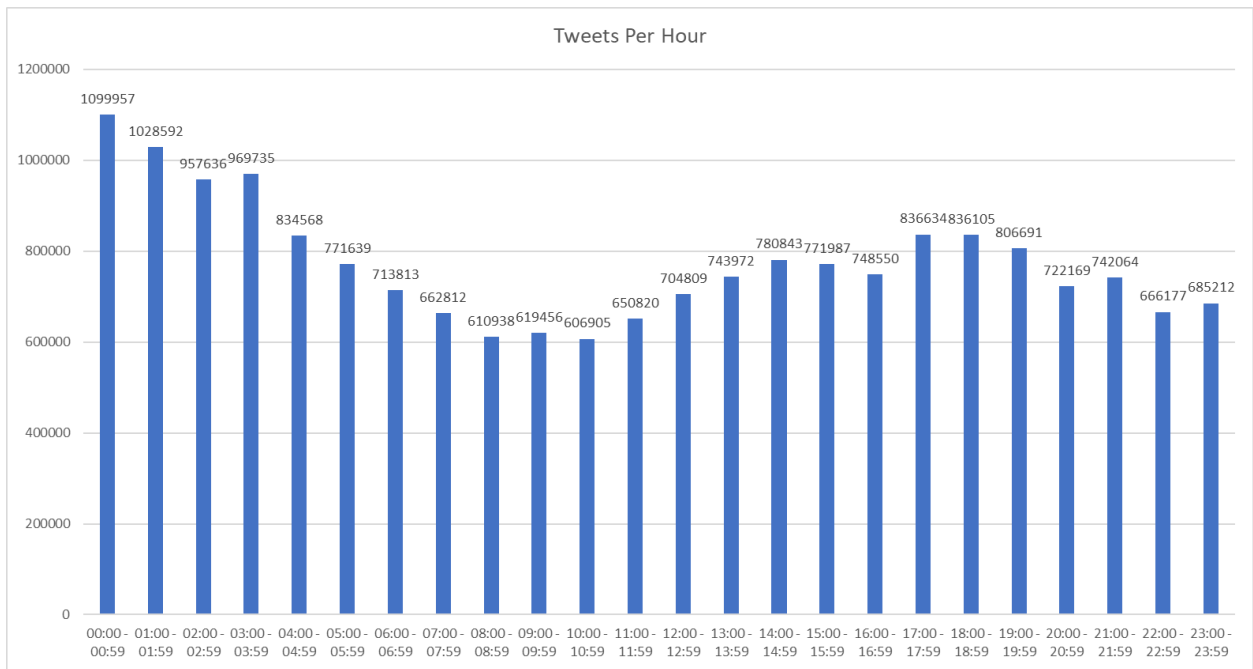


Part 1

Output from the Code:

```
sh-4.1# hadoop fs -cat /user/root/output16/part-r-00000
00: 1099957
01: 1028592
02: 957636
03: 969735
04: 834568
05: 771639
06: 713813
07: 662812
08: 610938
09: 619456
10: 606905
11: 650820
12: 704809
13: 743972
14: 780843
15: 771987
16: 748550
17: 836634
18: 836105
19: 806691
20: 722169
21: 742064
22: 666177
23: 685212
sh-4.1#
```

Histogram:



Part 2

Output from the Code:

```
sh-4.1# hadoop fs -cat /user/root/output15/part-r-00000
00: 5112
01: 4929
02: 5406
03: 7347
04: 7916
05: 8442
06: 8215
07: 7108
08: 5789
09: 4686
10: 3997
11: 3987
12: 4322
13: 4294
14: 4643
15: 4356
16: 4023
17: 4171
18: 3624
19: 3367
20: 2918
21: 3569
22: 2981
23: 3234
sh-4.1#
```

Histogram

