## **Word Count**

```
import sys
 from pyspark import SparkContext
 sc = SparkContext(appName="WordCountExample")
 lines = sc.textFile(sys.argv[1])
 counts = lines.flatMap(lambda x: x.split(' ')) \
                             .map(lambda x: (x, 1)) \setminus
                             .reduceByKey(lambda x,y:x+y)
 output = counts.collect()
 for (word, count) in output:
       print "%s: %i" % (word, count)
 sc.stop()
                   w1 w2 w3
                   w1 w1 w3
                   w1 w3 w3
               flatMap(lambda x: x.split(' '))
RDD words
             [w1, w2, w3, w1, w1, w3, w1, w3, w3]
                 map(lambda x: (x,1))
RDD words with
           [(w1,1),\,(w2,1),\,(w3,1),\,(w1,1),\,w1,1),(w1,1),
initial counts
           (w3,1), (w1,1), (w3,1), (w3,1)]
              reduceByKey(lambda x,y:x+y))
RDD words with
                 [(w1,4), (w2,1), (w3,4)]
final counts
```

## Run using command line

- Turn on docker bash
- spark-submit wordcount.py README.md
- Result will be shown as follows

```
19/05/19 07:56:51 INFO scheduler.TaskSchedulerImpl: Removed pool
19/05/19 07:56:51 INFO scheduler.DAGScheduler: ResultStage:
) finished in 0.150 s
19/05/19 07:56:51 INFO scheduler.DAGScheduler: Job 0 finished, took 2.050066 s
Turks: 1
States,294: 1
Algeria,United: 1
States,2025: 1
States,2025: 1
States,555: 1
States,555: 1
States,588: 1
States,588: 1
States,588: 1
```