```
root@student: /home/student

root@student:/home/student# nano wcount.txt
root@student:/home/student# spark-shell
24/04/18 10:28:03 WARN Utils: Your hostname, student resolves to a loopback address: 127.0.1.1; using 10.11.5.80 instead (on interface enp3s0)
24/04/18 10:28:03 WARN Utils: Set SPARK_LOCAL_IP if you need to bind to another address
Setting default log level to "WARN".
To adjust logging level use sc.setLogLevel(newLevel). For SparkR, use setLogLevel(newLevel).
24/04/18 10:28:07 WARN NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
Spark context Web UI available at http://10.11.5.80:4040
Spark context available as 'sc' (master = local[*], app id = local-1713416288721).
Spark session available as 'spark'.
Welcome to
      ____              __
     / __/__  ___ _____/ /__
    _\ \/ _ \/ _ `/ __/  '_/
   /___/ .__/\_,_/_/ /_/\_\   version 3.3.1
      /_/

Using Scala version 2.12.15 (OpenJDK 64-Bit Server VM, Java 11.0.22)
Type in expressions to have them evaluated.
Type :help for more information.

scala> val inputfile = sc.textFile("wcount.txt")
inputfile: org.apache.spark.rdd.RDD[String] = wcount.txt MapPartitionsRDD[1] at textFile at <console>:23

scala> val counts = inputfile.flatMap(line=>line.split(" ")).map(word=>(word,1)).reduceByKey(_+_);
counts: org.apache.spark.rdd.RDD[(String, Int)] = ShuffledRDD[4] at reduceByKey at <console>:23

scala> counts.toDebugString
res0: String =
(2) ShuffledRDD[4] at reduceByKey at <console>:23 []
 +-(2) MapPartitionsRDD[3] at map at <console>:23 []
    |  MapPartitionsRDD[2] at flatMap at <console>:23 []
    |  wcount.txt MapPartitionsRDD[1] at textFile at <console>:23 []
    |  wcount.txt HadoopRDD[0] at textFile at <console>:23 []

scala> counts.cache()
res1: counts.type = ShuffledRDD[4] at reduceByKey at <console>:23

scala> counts.saveAsTextFile("Output")

scala>
```

```
root@student: /home/student/Output

(base) student@student:~$ cd Output
(base) student@student:~/Output$ su
Password:
root@student:/home/student/Output# cat part-00000
(typed,1)
(are,1)
(Java.,1)
(concise,,1)
(is,1)
(object-oriented,1)
(address,1)
(criticisms,1)
(language,1)
(Scala's,1)
(design,1)
(statically,1)
(Scala,1)
(supports,1)
root@student:/home/student/Output# cat part-00001
(Designed,1)
(general-purpose,1)
(that,1)
(a,1)
(many,1)
(high-level,1)
(be,1)
(programming.,1)
(strong,1)
(intended,1)
(to,2)
(of,2)
(both,1)
(programming,2)
(and,1)
(functional,1)
(decisions,1)
root@student:/home/student/Output#
```