FINISHED ▷ ⋇ 📖 ⚙

```
import org.apache.spark.streaming._
import org.apache.spark.streaming.twitter._
import org.apache.spark.storage.StorageLevel
import scala.io.Source
import scala.collection.mutable.HashMap
import java.io.File
import org.apache.log4j.Logger
import org.apache.log4j.Level
import sys.process.stringSeqToProcess
```

```
import org.apache.spark.streaming._
import org.apache.spark.streaming.twitter._
import org.apache.spark.storage.StorageLevel
import scala.io.Source
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import org.apache.log4j.Level
import sys.process.stringSeqToProcess
```

Took 21 sec. Last updated by anonymous at January 26 2017, 8:39:26 PM.

FINISHED ▷ ⋇ 📖 ⚙

```
/** Configures the Oauth Credentials for accessing Twitter */
def configureTwitterCredentials(apiKey: String, apiSecret: String, accessToken: String, acces:
  val configs = new HashMap[String, String] ++= Seq(
    "apiKey" -> apiKey, "apiSecret" -> apiSecret, "accessToken" -> accessToken, "accessTokenS(
  println("Configuring Twitter OAuth")
  configs.foreach{ case(key, value) =>
    if (value.trim.isEmpty) {
      throw new Exception("Error setting authentication - value for " + key + " not set")
    }
    val fullKey = "twitter4j.oauth." + key.replace("api", "consumer")
    System.setProperty(fullKey, value.trim)
    println("\tProperty " + fullKey + " set as [" + value.trim + "]")
  }
  println()
}
```

```
configureTwitterCredentials: (apiKey: String, apiSecret: String, accessToken: String, accessTo
kenSecret: String)Unit
```

Took 3 sec. Last updated by anonymous at January 26 2017, 8:39:31 PM.

FINISHED ▷ ⋇ 📖 ⚙

```
// Configure Twitter credentials
val apiKey = "bLXY4r0UzTqrmthbDm0md3Zkd"
val apiSecret = "MP13tycZZnTgrORvTNfYVgSEMygQrIxDKu8zjjLH1xGnnJMu71"
val accessToken = "2254153902-Upm6MWs4ouIQ1z9N3p5IYWYa9PsbrDijou97NGs"
val accessTokenSecret = "Hnwc5PzXiMogl99wuDMGG2v6adpu7NiIe1THiNWIm812a"
configureTwitterCredentials(apiKey, apiSecret, accessToken, accessTokenSecret)
```

```
apiKey: String = bLXY4r0UzTqrmthbDm0md3Zkd
apiSecret: String = MP13tycZZnTgrORvTNfYVgSEMygQrIxDKu8zjjLH1xGnnJMu71
accessToken: String = 2254153902-Upm6MWs4ouIQ1z9N3p5IYWYa9PsbrDijou97NGs
accessTokenSecret: String = Hnwc5PzXiMogl99wuDMGG2v6adpu7NiIe1THiNWIm812a
Configuring Twitter OAuth
        Property twitter4j.oauth.consumerKey set as [bLXY4r0UzTqrmthbDm0md3Zkd]
        Property twitter4j.oauth.accessToken set as [2254153902-Upm6MWs4ouIQ1z9N3p5IYWYa9PsbrD
ijou97NGs]
        Property twitter4j.oauth.consumerSecret set as [MP13tycZZnTgrORvTNfYVgSEMygQrIxDKu8zjj
LH1xGnnJMu71]
        Property twitter4j.oauth.accessTokenSecret set as [Hnwc5PzXiMogl99wuDMGG2v6adpu7NiIe1T
HiNWIm812a]
```

Took 3 sec. Last updated by anonymous at January 26 2017, 8:41:01 PM.

FINISHED ▷ ⛶ 📖 ⚙

```
import org.apache.spark.streaming.twitter._
val ssc = new StreamingContext(sc, Seconds(2))
val tweets = TwitterUtils.createStream(ssc, None)
val twt = tweets.window(Seconds(60))
```

```
import org.apache.spark.streaming.twitter._
ssc: org.apache.spark.streaming.StreamingContext = org.apache.spark.streaming.StreamingContext
@14e2b34
tweets: org.apache.spark.streaming.dstream.ReceiverInputDStream[twitter4j.Status] = org.apach
e.spark.streaming.twitter.TwitterInputDStream@407be6ce
twt: org.apache.spark.streaming.dstream.DStream[twitter4j.Status] = org.apache.spark.streamin
g.dstream.WindowedDStream@3af7f891
```

Took 2 sec. Last updated by anonymous at January 26 2017, 8:41:17 PM.

FINISHED ▷ ⛶ 📖 ⚙

```
case class Tweet(createdAt:Long, text:String)
twt.map(status=>
  Tweet(status.getCreatedAt().getTime()/1000, status.getText())
).foreachRDD(rdd=>
  // Below line works only in spark 1.3.0.
  // For spark 1.1.x and spark 1.2.x,
  // use rdd.registerTempTable("tweets") instead.
  rdd.toDF().registerTempTable("tweets")
)

twt.print

ssc.start()
```

itter Web Client', isTruncated=false, inReplyToStatusId=-1, inReplyToUserId=-1, isFavorite
d=false, isRetweeted=false, favoriteCount=0, inReplyToScreenName='null', geoLocation=null, pla
ce=null, retweetCount=0, isPossiblySensitive=false, lang='tr', contributorsIDs=[], retweetedSt
atus=StatusJSONImpl{createdAt=Thu Jan 26 20:39:50 EST 2017, id=824794010392801280, text='#izmi
rescort Nilay 23 yaşında   ZİRVE! %100 Gerçek! Ev ve otellere geliyor. Whatsapp:0546 934 0517
 #escortizmir https://t.co/I8sHYuuHId', source='Tw
itter Web Client', isTruncated=false, inReplyToStatusId=-1, inReplyToUserId=-1, isFavorite
d=false, isRetweeted=false, favoriteCount=1396, inReplyToScreenName='null', geoLocation=null,
 place=null, retweetCount=1400, isPossiblySensitive=false, lang='tr', contributorsIDs=[], retw
eetedStatus=null, userMentionEntities=[], urlEntities=[], hashtagEntities=[HashtagEntityJSONIm
pl{izmirescort'], HashtagEntityJSONImpl{text='escortizmir'}], mediaEntities=[MediaEntity
JSONImpl{id=824226751496777728, url=https://t.co/I8sHYuuHId, mediaURL=http://pbs.twimg.com/med
ia/C3A93RFW8AA5hbj.jpg, mediaURLHttps=https://pbs.twimg.com/media/C3A93RFW8AA5hbj.jpg, expande
dURL=https://twitter.com/mixizmirescort/status/824226910792192000/photo/1, displayURL='pic.twi
tter.com/I8sHYuuHId', sizes={0=Size{width=150, height=150, resize=101}, 1=Size{width=679, heig
ht=680, resize=100}, 2=Size{width=1194, height=1195, resize=100}, 3=Size{width=1194, height=11
95, resize=100}}, type=photo}], symbolEntities=[], currentUserRetweetId=-1, user=UserJSONImpl
{id=795835965201903616, name='Escort Mix', screenName='escortmix50', location='null', descript

Took 4 sec. Last updated by anonymous at January 26 2017, 8:41:38 PM.

FINISHED ▷ ⚒ 📖 ⚙

`%sql select * from tweets where text like '%trump%' limit 10`

createdAt	text
1,485,481,375	@dumptrump33 Well he's definitely not getting a tip.

Took 1 sec. Last updated by anonymous at January 26 2017, 8:43:01 PM.

FINISHED ▷ ⚒ 📖 ⚙

`%sql select createdAt, count(1) from tweets group by createdAt order by createdAt`

createdAt	count(1)
1,485,481,335	2
1,485,481,336	48
1,485,481,337	46
1,485,481,338	42
1,485,481,339	48
1,485,481,340	47
1,485,481,341	52
1,485,481,342	46
1.485.481.343	44

Took 5 sec. Last updated by anonymous at January 26 2017, 8:43:21 PM.

```scala
def sentiment(s:String) : String = {
    val positive = Array("like", "love", "good", "great", "happy", "cool", "the", "one", "that
    val negative = Array("hate", "bad", "stupid", "is")

    var st = 0;

    val words = s.split(" ")
    positive.foreach(p =>
        words.foreach(w =>
            if(p==w) st = st+1
        )
    )

    negative.foreach(p=>
        words.foreach(w=>
            if(p==w) st = st-1
        )
    )
    if(st>0)
        "positivie"
    else if(st<0)
        "negative"
    else
        "neutral"
}

// Below line works only in spark 1.3.0.
// For spark 1.1.x and spark 1.2.x,
// use sqlc.registerFunction("sentiment", sentiment _) instead.
sqlc.udf.register("sentiment", sentiment _)
```

FINISHED

```
sentiment: (s: String)String
res11: org.apache.spark.sql.expressions.UserDefinedFunction = UserDefinedFunction(<function1>,
StringType,Some(List(StringType)))
```

Took 2 sec. Last updated by anonymous at January 26 2017, 8:43:37 PM.

%sql select sentiment(text), count(1) from tweets where text like '%trump%' FINISHED

UDF(text)	count(1)
neutral	3

Zeppelin

Twitter

Took 3 sec. Last updated by anonymous at January 26 2017, 8:43:56 PM.

READY