```
[33]: congress_sample.printSchema()
     Error displaying widget: model not found
     root
      |-- {"extended_tweet":{"entities":{"urls":[]: string (nullable = true)
      |-- "hashtags":[]1: string (nullable = true)
      |-- "user_mentions":[{"indices":[02: string (nullable = true)
      |-- 8]3: string (nullable = true)
      |-- "screen_name":"jillwow"4: string (nullable = true)
      |-- "id_str":"464222379"5: string (nullable = true)
      |-- "name":"jillie"6: string (nullable = true)
      |-- "id":464222379}7: string (nullable = true)
      |-- {"indices":[98: string (nullable = true)
      |-- 23]9: string (nullable = true)
      |-- "screen_name": "RepAdamSchiff"10: string (nullable = true)
      |-- "id_str":"29501253"11: string (nullable = true)
      |-- "name": "Adam Schiff"12: string (nullable = true)
      |-- "id":29501253}]13: string (nullable = true)
      |-- "symbols":[]}14: string (nullable = true)
       |-- "full_text":"@jillwow @RepAdamSchiff That is what is so disturbing & ominous 🍪 Also: string
     (nullable = true)
      |-- we must remember our world history - didn\u2019t Hiler only have 30% or so support from the Ger
     man ppl before he began his persecution of the Jewish ppl? 😊": string (nullable = true)
      |-- "display_text_range":[2417: string (nullable = true)
      |-- 226]}: string (nullable = true)
      |-- "in_reply_to_status_id_str":"1047522510839975936": string (nullable = true)
      |-- "in_reply_to_status_id":1047522510839975936: string (nullable = true)
      |-- "created_at":"Wed Oct 03 17:30:03 +0000 2018": string (nullable = true)
      |-- "in_reply_to_user_id_str":"464222379": string (nullable = true)
      |-- "source":"<a href=\"http://twitter.com/download/inhone\" rel=\"nofollow\">Twitter for iPhone<\/a
 [ ]: congress_sample.rdd.map(lambda r: r.notifications).collect()
[19]:
      Error displaying widget: model not found
  [ ]: # map
       rdd = congress_sample
       sorted(rdd.map(lambda x: (x, 1)).collect())
  [ ]: #Reduce
       wordsRDD = sc.parallelize(congress_sample, 100)
       wordCountsCollected = (wordsRDD
                              .map(lambda w: (w, 1))
                              .reduceByKey(lambda x,y: x+y)
                              .collect())
[39]:
       congress_sample = spark.read.text("s3://us-congress-tweets/raw/files.txt")
       congress_sample.collect()
      Error displaying widget: model not found
```