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import org.apache.spark.SparkConf
import org.apache.spark.SparkContext

val productsMap = sc.textFile("file:///root/retail_db/
products").map( rec => (rec.split(",")(1).toInt,rec.split(",")
(0).toInt))

val categoriesMap = sc.textFile("file:///root/retail_db/
categories").map( rec => (rec.split(",")(0).toInt,rec.split(",")
(1).toInt))

val departmentsMap = sc.textFile("file:///root/retail_db/
departments").map(rec => ( rec.split(",")(0).toInt,rec.split(",")
(1).toString))

val categoryJoin = productsMap.join(categoriesMap)

val catMap = categoryJoin.map( rec => (rec._2._2,rec._2._1))

val ProDep = catMap.join(departmentsMap)

val ProDepMap = ProDep.map( rec => ( rec._2._1,rec._2._2))

val bv = sc.broadcast(ProDepMap.collectAsMap())

val ordersFilMap = sc.textFile("file:///root/retail_db/
orders").filter( rec => (rec.split(",")(3) == "COMPLETE")).map( rec =>
(rec.split(",")(0).toInt,rec.split(",")(1).toString))

val order_itemsMap = sc.textFile("file:///root/retail_db/
order_items").map( rec => ( rec.split(",")(1).toInt,
(bv.value.get(rec.split(",")(2).toInt).get,rec.split(",")
(4).toFloat)))

val ordersJoin = ordersFilMap.join(order_itemsMap)

val ordersJoinMap = ordersJoin.map( rec =>
((rec._2._1,rec._2._2._1),rec._2._2._2)).reduceByKey((acc, value) =>
acc + value)

val TotalRevPerDepartment = ordersJoinMap.sortByKey()

val totalRevPerDepSorted = TotalRevPerDepartment.map( rec => rec._1._1
+ "," + rec._1._2 + "," + rec._2 )

totalRevPerDepSorted.saveAsTextFile("file:///root/DepRevPerDay")

```

