

源代码提交说明

1 总述

源代码位于 实验代码 文件夹中，ConnectedComponents 文件夹中包含了实验任务三的代码，PageRank 文件夹中包含了实验任务四的代码。

2 ConnectedComponents

2.1 运行步骤

使用sbt编译打包程序。

```
1 | cd ConnectedComponents
2 | /usr/local/sbt/sbt package
```

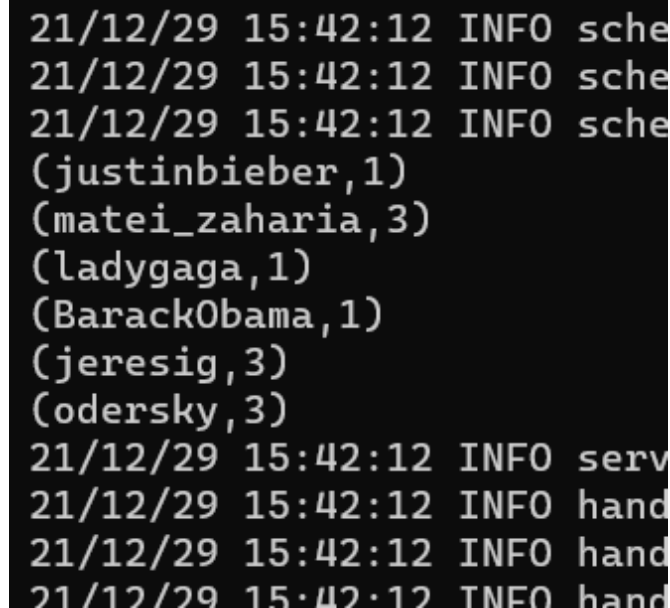
启动集群后，将数据文件上传到分布式文件系统。

```
1 | hadoop fs -put user.txt /user/root/data/graphx/user.txt
2 | hadoop fs -put followers.txt /user/root/data/graphx/followers.txt
```

提交任务到集群并运行。

```
1 | /usr/local/spark/bin/spark-submit --class
   | "org.apache.spark.examples.graphx.ConnectedComponentsExample" target/scala-
   | 2.11/simple-project_2.11-1.0.jar
```

2.2 运行结果



```
21/12/29 15:42:12 INFO sche
21/12/29 15:42:12 INFO sche
21/12/29 15:42:12 INFO sche
(justinbieber,1)
(matei_zaharia,3)
(ladygaga,1)
(BarackObama,1)
(jeresig,3)
(odersky,3)
21/12/29 15:42:12 INFO serv
21/12/29 15:42:12 INFO hand
21/12/29 15:42:12 INFO hand
21/12/29 15:42:12 INFO hand
```

3 PageRank

3.1 运行步骤

使用sbt编译打包程序。

```
1 | cd PageRank
2 | /usr/local/sbt/sbt package
```

启动集群后，将数据文件上传到分布式文件系统。

```
1 | hadoop fs -put wiki-Vote.txt /user/root/data/graphx/wiki-Vote.txt
```

提交任务到集群并运行。

```
1 | /usr/local/spark/bin/spark-submit --class "PageRankExample" target/scala-
  2.11/simple-project_2.11-1.0.jar
```

3.2 运行结果

```
21/12/29 18:06:10 INFO scheduler.DAGScheduler: Job 29 finished
21/12/29 18:06:10 INFO scheduler.TaskSetManager: Finished task 0 of stage 0 (1 tasks) in 10.932666178472552 seconds on 15 of 15 executors
21/12/29 18:06:10 INFO scheduler.TaskSchedulerImpl: Removed Task 0 (4037, 13.687699331078953) from the queue
(15, 10.932666178472552)
(6634, 10.656272834035363)
(2625, 9.755493724371009)
(2398, 7.7500795360903005)
(2470, 7.4980349973549)
(2237, 7.417371235363198)
(4191, 6.737652594679044)
(7553, 6.446124253989366)
(5254, 6.387824930252768)
(2328, 6.058502278677398)
(1186, 6.047484088321153)
(1297, 5.78094778260847)
(4335, 5.753966688051237)
(7620, 5.740088767693301)
(5412, 5.7009379429249805)
(7632, 5.667775066789827)
(4875, 5.566977508206254)
(6946, 5.372689389210791)
(3352, 5.300009625474641)
21/12/29 18:06:10 INFO server.ServerConnector: Stopped ServerConnector for 10.10.10.10
21/12/29 18:06:10 INFO handler.ContextHandler: Stopped o.s.j.s.h.ContextHandler@10.10.10.10
21/12/29 18:06:10 INFO handler.ContextHandler: Stopped o.s.j.s.h.ContextHandler@10.10.10.10
21/12/29 18:06:10 INFO handler.ContextHandler: Stopped o.s.j.s.h.ContextHandler@10.10.10.10
21/12/29 18:06:10 INFO handler.ContextHandler: Stopped o.s.j.s.h.ContextHandler@10.10.10.10
```