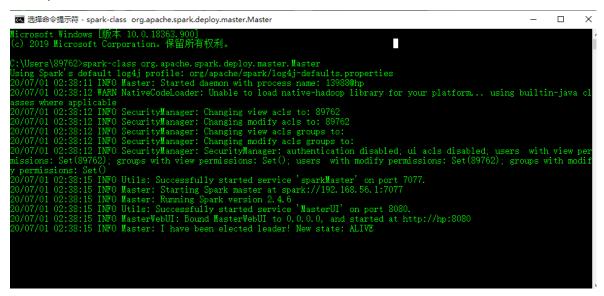
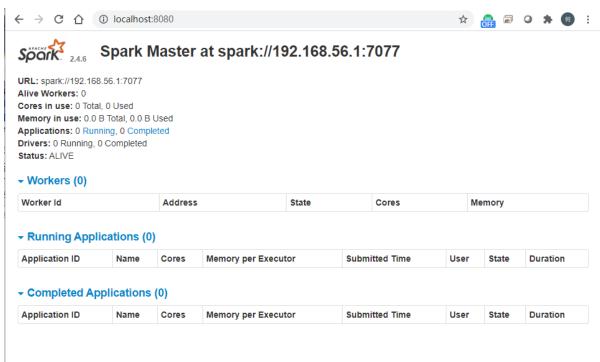
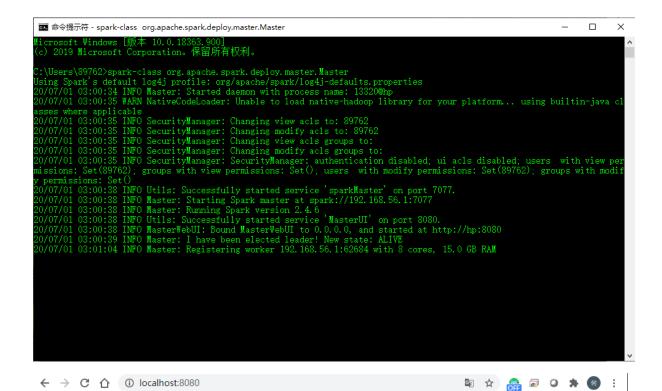
```
the class/function where you have made your change: (in the iteration part)
pageRank = contribs.reduceByKey(new RankAdjust()).mapValues(sum -> (1-
beta)/numOfPages.value() + sum * beta);
```

start Spark master node:





start a worker node:





Spark Master at spark://192.168.56.1:7077

URL: spark://192.168.56.1:7077

Alive Workers: 1

Cores in use: 8 Total, 0 Used

Memory in use: 15.0 GB Total, 0.0 B Used Applications: 0 Running, 0 Completed Drivers: 0 Running, 0 Completed

Status: ALIVE

→ Workers (1)

Worker Id	Address	State	Cores	Memory
worker-20200701030103-192.168.56.1-62684	192.168.56.1:62684	ALIVE	8 (0 Used)	15.0 GB (0.0 B Used)

▼ Running Applications (0)

Application	ı ID	Name	Cores	Memory per Executor	Submitted Time	User	State	Duration	
-------------	------	------	-------	---------------------	----------------	------	-------	----------	--

- Completed Applications (0)

	Application ID	Name	Cores	Memory per Executor	Submitted Time	User	State	Duration	
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submit the job, and the result of running the job:

```
C.\Users\89762\spark-submit --class SparkFageRank --master spark://hostIP:7077 SparkFageRank, jar
20/07/01 03:02:59 WARN NativeCodeLoader: Unable to load native-hadoop library for your platform.. using builtin-java cl
asses where applicable
Using Spark's default log4j profile: org/apache/spark/log4j-defaults.properties
20/07/01 03:02:59 NRO SparkContext: Running Spark version 2.4.6
20/07/01 03:02:59 NRO SparkContext: Submitted application: SparkAverage
20/07/01 03:02:59 NRO SecurityManager: Changing modify acls to: 89762
20/07/01 03:02:59 NRO SecurityManager: Changing modify acls to: 89762
20/07/01 03:02:59 NRO SecurityManager: Changing modify acls to: 89762
20/07/01 03:02:59 NRO SecurityManager: Changing modify acls groups to:
20/07/01 03:02:59 NRO SecurityManager: Changing modify acls groups to:
20/07/01 03:02:59 NRO SecurityManager: SecurityManager; authentication disabled; ui acls disabled: users with view permissions: Set(89762); groups with modify permissions: Set(89762); groups with modify permissions: Set(0)
20/07/01 03:02:59 NRO SecurityManager: SecurityManager; authentication disabled; ui acls disabled: users with view permissions: Set(0)
20/07/01 03:02:59 NRO SecurityManager: SecurityManager; authentication disabled; ui acls disabled: users with modify permissions: Set(89762); groups with modify permissions: Set(0)
20/07/01 03:02:59 NRO SecurityManager: SecurityManager; authentication disabled; ui acls disabled; users with modify permissions: Set(89762); groups with modify permissio
```