

	Task 1	Task 2	Task 3
Hadoop (Java)	22.409s	23.933s	21.479s
Spark (Python)	-	8.628s	9.617s

Performance measurement:

In Hadoop using Date().getTime() from Date package

In Spark using time.time() from time package

I have got the time difference by checking the time before and after the execution.

Setup details:

System: MAC OSX 10.14, Macbook Pro 2016 with 8GB RAM

Hadoop setup done in docker:

<https://linoxide.com/cluster/setup-single-node-hadoop-cluster-docker/>

Spark setup on local machine:

<https://medium.com/beeranddiapers/installing-apache-spark-on-mac-os-ce416007d79f>