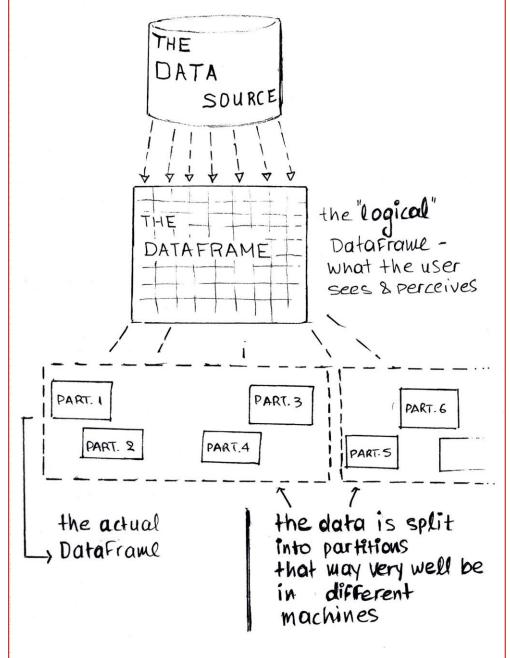
## Big Data e Computação em Nuvem Aula 10 Spark DataFrames - Cache

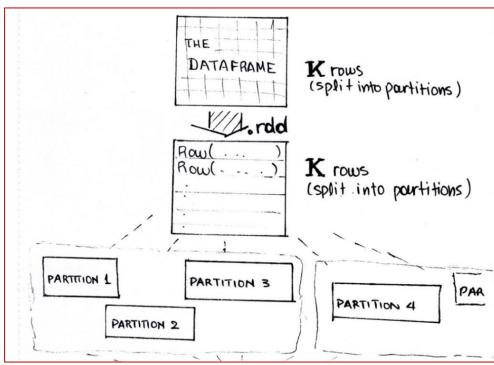
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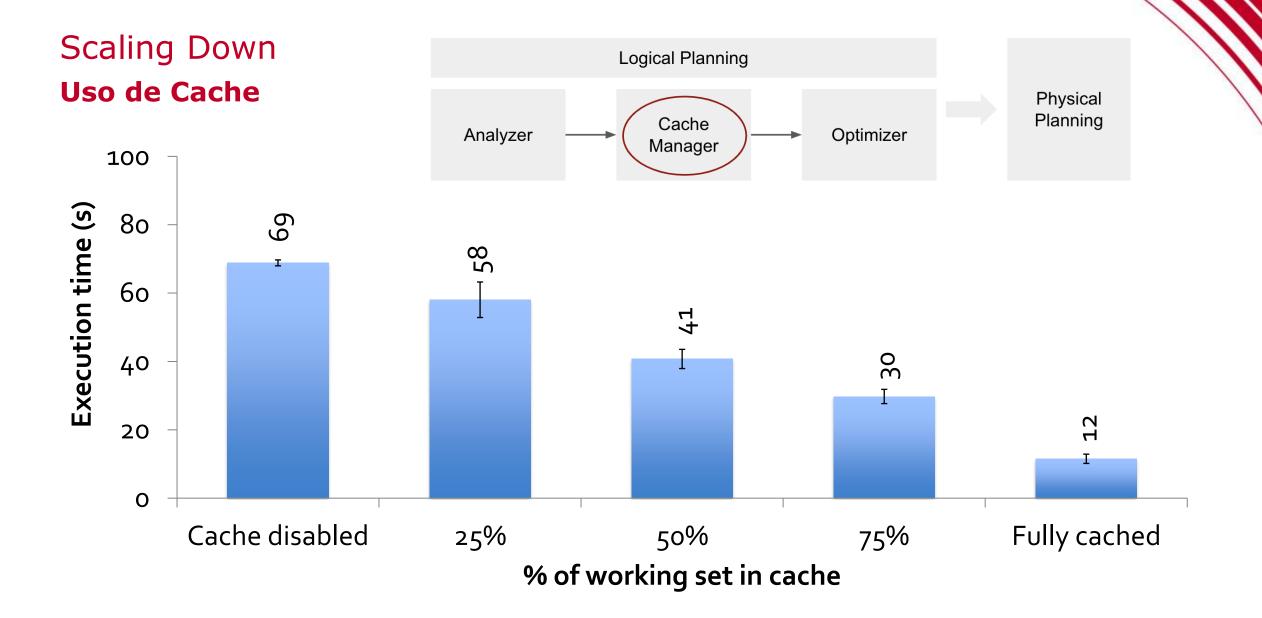
#### DataFrame





### Spark – Mecanismo de Cache

```
Cache 1
                                             Base RDD
                                                                                Worker
                                                          Transformed RDD
lines = spark.textFile("hdfs://...")
                                                                      lasns
errors = lines.filter(lambda s: s.startswith("ERROR"))
                                                                                Block 1
                                                                Driver
                                                                       results
messages = errors.map(lambda s: s.split('\t')[2])
messages.cache()
                                                     Action
                                                                                   Cache 2
messages.filter(lambda s: "foo" in s).count()
                                                                               Worker
messages.filter(lambda s: "bar" in s).count()
                                                              Cache 3
                                                                                Block 2
                                                            Worker
                                                             Block 3
```



#### Uso do cache

```
inputRDD = sc.textFile("words.txt").cache()
```

```
print("Number of words: ",inputRDD.count())
print("Number of distinct words: ", inputRDD.distinct().count())
```

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