Tutorial2 Report:

In this tutorial, I have used a few Spark transformations and actions for a simple use case of finding mutual friends between two persons.
The Spark Transformations used are: Union, Intersection, distinct
The Spark Actions used are: count, foreach, collect.

Input:
Two files named Person1 and Person2 are given as input for the program. Both the files contain respective friends names.
Person1' s Friends:

```
1    Ganesh
2    Bhagi
3    Sachin
4    Obama
5    Micheal
6    Harry
7    Sarah
8    David
```

Person2's Friends:

```
1    Sarah
2    Ganesh
3    Sachin
4    Abhi
5    Ganguly
6    Dravid
7    Sridhar
8    Aruna
9    David
```

And then created RDD's for both the files using sc.textFile() function

OutPut:
Count of total number of friends for respective persons:
Person1 Friends count:

```
17/02/01 20:29:20 INFO DAGScheduler: Job 0 finished: count at ScalaTransformsActions.scala:16, took 0.544626 s
Total number of friends for person1 are 8
17/02/01 20:29:20 INFO FileInputFormat: Total input paths to process : 1
```

Person2's friends count:

```
17/02/01 20:29:20 INFO DAGScheduler: Job 1 finished: count at ScalaTransformsActions.scala:18, took 0.057785 s
Total number of friends for person2 are 9
17/02/01 20:29:20 INFO SparkContext: Starting job: collect at ScalaTransformsActions.scala:22
```

Mutual Friends List of both the persons:

```
17/02/01 20:29:20 INFO DAGScheduler: Job 2 finished: collect at ScalaTransformsActions.scala:22, took 0.363799 s
Ganesh
Sachin
David
Sarah
Are mutual Friends of Person1 and Person2
17/02/01 20:29:20 INFO SparkContext: Starting job: count at ScalaTransformsActions.scala:34
```

Total number of distinct friends in both the list

17/02/01 20:29:21 INFO DAGScheduler: Job 3 finished: count at ScalaTransformsActions.scala:34, took 0.231021 s
Total number of unique friends of Person1 and Person2 are 13
17/02/01 20:29:21 INFO SparkContext: Invoking stop() from shutdown hook

Combined list of Distinct friends:
17/02/01 20:55:20 INFO ShuffleBlockFetcherIterator: Started 0 remote fetches in 0 ms
Harry
Sachin
David
Bhagi
Dravid
Abhi
Ganesh
Obama
Ganguly
Aruna
Micheal
Sarah
Sridhar
17/02/01 20:55:20 INFO Executor: Finished task 1.0 in stage 6.0 (TID 15). 1165 bytes result sent to driver

Use Case Paradigm: