

b. Task 1:

- i. **Problem Statement:**
Change the replication factor.
- ii. **Description:**
Change the replication factor of your Hadoop cluster to 2 and record which file(s) need(s) to be edited and what parameter(s) need(s) to be changed.
- iii. **Comments:**
 1. You need to submit any files that were edited to achieve this task.

c. Task 2:

- i. **Problem Statement:**
Batsman Vulnerability to a Bowler.
- ii. **Description:**
For every batsman-bowler pair to have more than 5 deliveries, in total, against each other, find the # of times a batsman got out to that bowler **using MapReduce**.
- iii. **Comments:**
 1. Sort the output in **descending** order of # of wickets.
 2. In the case of 2 batsman bowler pairs having the same # of wicket occurrences, the pair who have played lesser number of balls should come first in the list. In case of a tie even after the previous condition, print the list in alphabetical order (based on Batsman name).
 3. Wickets **do not include run-outs** as run-outs are not credited to the bowler
 4. While counting number of deliveries, take into account any extras bowled by the bowler.
 5. Output any numbers as integers only
- iv. **Output Format:**
 1. Comma separated values in the form of -
Batsman, Bowler, # of wickets, # of deliveries
 2. Each tuple/record must be in a new line with there should be **no spaces** in between the values.
Eg. MS Dhoni,RD Chahar,7,24
SR Watson,SN Thakur,6,33
...

d. Task 3:

i. **Problem Statement:**

Bowler Vulnerability to a Batsman.

ii. **Description:**

For every batsman-bowler pair to have more than 5 deliveries, in total, against each other, find the # of runs conceded by a bowler against a particular batsman **using MapReduce**.

iii. **Comments:**

1. Sort the output in **descending** order of # of runs.
2. In the case of 2 batsman bowler pairs having the same # of runs conceded, the pair who have played lesser number of balls should come first in the list. In case of a tie even after the previous condition, print the list in alphabetical order (based on Bowler name).
3. Runs conceded by a bowler **include** any extras conceded (Wides, No Balls, etc.)
4. While counting number of deliveries, take into account any extras bowled by the bowler.
5. Output any numbers as integers only.

iv. **Output Format:**

1. Comma separated values in the form of -
Bowler, Batsman, # of runs conceded, # of deliveries
2. Each pair must be in a new line with there should be **no spaces** in between the values. (The values below are just for representational purposes)
Eg. RD Chahar,MS Dhoni,43,24
SN Thakur,SR Watson,41,33
...

e. Task 4:

i. **Problem Statement:**

Most prolific batsman at each venue. (Use the "Venue" column is present in the dataset).

ii. **Description:**

For each venue at which an IPL match has been played, find the batsman who has been the most prolific there **using MapReduce**. Use the strike rate of the batsman at that venue as a performance measure.

[Strike Rate = (Total No. of runs scored * 100)/ Total No. Of deliveries faced]

(The batsman should have faced a **minimum of 10 deliveries** at the venue)

(The batsman can have played in the same venue in different matches, consider the **overall** runs and deliveries)

iii. **Comments:**

1. Sort the output **alphabetically** based on the venue. In the case of 2 batsmen having the same strike rate, choose the batsman who has scored more number of runs.
2. **Ignore** all extras in the dataset, **do not consider** the runs scored or balls faced during all types of extras.
3. If the venue name contains commas or quotes, we want you to consider the entire name.
4. Consider the venue names **as is**.

For example

- A. "M. Chinnaswamy Stadium" and "M Chinnaswamy Stadium" should be considered as two different venues (There's a difference of "dot").
- B. "Punjab Cricket Association Stadium" and "Punjab Cricket Association Stadium IS Bindra Stadium" should be considered as two different venues.

iv. Output Format:

1. Comma separated values in the form of -
Venue,Batsman
2. Each pair must be in a new line with **no spaces** between the values.

Eg. Eden Gardens,SC Hussey

Wankhede Stadium,MS Dhoni

...