

Ex – 2a Data frames in R

Creating a data frame

VIT has conducted technical events for the students. It maintains the name of the participant and the score obtained in different events.

1. Create a data frame by considering 5 students and 4 events. Each event has a maximum score of 10. If a student participates in an event, its entry contains the score value and 0 otherwise.
2. View the contents of the data frame.
3. Find the total score of each participant.
4. Append a column to include the total score of the participants and view the data frame.
5. Find the maximum score and display the name of the participant who scored it.
6. Compute the average score of each event and append it as a new row in the data frame.

Store the details in a comma separated values (csv) file. Also suppress the row numbers.

Indexing and Slicing data frames

7. Read the content of 'Events.csv' in a data frame and view it.
8. Access the scores of participants in event2 using the column name.
9. Use index number to retrieve the same data.
10. Extract the score of third participant in event3.
11. Extract the scores of the first and second participant in all the events.
12. Display the names and total scores of all participants.
13. Make the column "name" as the row index of the data frame.
14. Display the names of the students participated in event3.
15. Obtain the names whose total score is above its average.