

**Name-Srushti Ghadge**

**Roll no-861**

**PRN-202201090125**

**Batch-H3**

**EDS activity**

## **Assignment no 1**

- 1) Find the statistical Analysis on Cricket Data (Run\_Average\_Strike) dataset  
(Refer Data Set 6)
  - a. Find the batsman who is having maximum strike rate
  - b. Find the batsman who scored the minimum runs
  - c. Find the average ball played by all the batsman
  - d. Find the batsman who out minimum time in the match
  - e. Clean the dataset if record is empty with 0 values or delete incomplete data row
  - f. Find the all the records of batsman who's strike rate is greater than 120
  - g. Find the all records who's average is below 20

**CODE :-**

```
import pandas as pd
df=pd.read_csv('/dataset6.csv')
batsman1=df.groupby('batsman')['strikerate'].sum().idxmax()
print("The batsman with maximum strike rate is:",batsman1)

batsman2=df.groupby('batsman')['total_runs'].min().idxmin()
print("The batsman with minimum run score is:",batsman2)

avgball=df.groupby('batsman')['numberofballs'].sum().mean()
print("The average of balls played by all the batsman is:",avgball)

batsman3=df.groupby('batsman')['out'].min().idxmin()
print("The batsman with minimum number of outs is:",batsman3)
```

```

print("Records with strike rate greater than 120 is:
\n",df[(df['strikerate']>120)])

print("Records with average less than 20 is:
\n",df[(df['average']<20)])

df1=pd.read_csv('/dataset6_1.csv')
df2=df1.dropna(axis=1)
print("The dataset with deleted rows is:\n",df2)

```

## OUTPUT:-

Assignment no 1

The batsman with maximum strike rate is: V Sehwag  
The batsman with minimum run score is: AC Gilchrist  
The average of balls played by all the batsman is: 2604.896551724138  
The batsman with minimum number of outs is: SE Marsh  
Records with strike rate greater than 120 is:

|    | batsman        | total_runs | out | numberofballs | average   | strikerate |
|----|----------------|------------|-----|---------------|-----------|------------|
| 0  | V Kohli        | 5426       | 152 | 4111          | 35.697368 | 131.087351 |
| 1  | SK Raina       | 5386       | 160 | 3916          | 33.662500 | 137.538304 |
| 2  | RG Sharma      | 4902       | 161 | 3742          | 30.447205 | 130.999466 |
| 3  | DA Warner      | 4717       | 114 | 3292          | 41.377193 | 143.286756 |
| 4  | S Dhawan       | 4601       | 137 | 3665          | 33.583942 | 125.538881 |
| 5  | CH Gayle       | 4525       | 110 | 2972          | 41.136364 | 152.254374 |
| 6  | MS Dhoni       | 4450       | 118 | 3206          | 37.711864 | 138.802246 |
| 7  | RV Uthappa     | 4420       | 156 | 3381          | 28.333333 | 130.730553 |
| 8  | AB de Villiers | 4414       | 104 | 2902          | 42.442308 | 152.101999 |
| 9  | G Gambhir      | 4219       | 134 | 3400          | 31.485075 | 124.088235 |
| 10 | AM Rahane      | 3834       | 117 | 3133          | 32.769231 | 122.374721 |
| 11 | KD Karthik     | 3669       | 138 | 2813          | 26.586957 | 130.430146 |
| 12 | SR Watson      | 3590       | 115 | 2566          | 31.217391 | 139.906469 |
| 13 | AT Rayudu      | 3313       | 114 | 2616          | 29.061404 | 126.643731 |
| 14 | YK Pathan      | 3222       | 110 | 2240          | 29.290909 | 143.839286 |
| 15 | BB McCullum    | 2886       | 106 | 2185          | 27.226415 | 132.082380 |
| 16 | PA Patel       | 2864       | 127 | 2352          | 22.551181 | 121.768708 |
| 17 | MK Pandey      | 2855       | 95  | 2352          | 30.052632 | 121.386054 |
| 18 | KA Pollard     | 2772       | 102 | 1879          | 27.176471 | 147.525279 |
| 19 | Yuvraj Singh   | 2755       | 109 | 2121          | 25.275229 | 129.891561 |
| 20 | V Sehwag       | 2728       | 98  | 1746          | 27.836735 | 156.242841 |
| 21 | M Vijay        | 2589       | 93  | 2104          | 27.838710 | 123.051331 |
| 22 | SE Marsh       | 2489       | 65  | 1866          | 38.292308 | 133.386924 |
| 24 | DR Smith       | 2385       | 81  | 1758          | 29.444444 | 135.665529 |
| 25 | SR Tendulkar   | 2334       | 71  | 1043          | 32.873239 | 120.123520 |
| 26 | SV Samson      | 2215       | 79  | 1693          | 28.037975 | 130.832841 |
| 28 | AC Gilchrist   | 2069       | 76  | 1492          | 27.223684 | 138.672922 |

Record with average less than 20 is:

0s completed at 11:45PM

Assignment no 1

The batsman with maximum strike rate is: V Sehwag  
The batsman with minimum run score is: AC Gilchrist  
The average of balls played by all the batsman is: 2604.896551724138  
The batsman with minimum number of outs is: SE Marsh  
Records with strike rate greater than 120 is:

|    | batsman        | total_runs | out | numberofballs | average    | strikerate |
|----|----------------|------------|-----|---------------|------------|------------|
| 0  | V Kohli        | 5426       | 152 | 35.697368     | 131.087351 |            |
| 1  | SK Raina       | 5386       | 160 | 33.662500     | 137.538304 |            |
| 2  | RG Sharma      | 4902       | 161 | 30.447205     | 130.999466 |            |
| 3  | DA Warner      | 4717       | 114 | 41.377193     | 143.286756 |            |
| 4  | S Dhawan       | 4601       | 137 | 33.583942     | 125.538881 |            |
| 5  | CH Gayle       | 4525       | 110 | 41.136364     | 152.254374 |            |
| 6  | MS Dhoni       | 4450       | 118 | 37.711864     | 138.802246 |            |
| 7  | RV Uthappa     | 4420       | 156 | 28.333333     | 130.730553 |            |
| 8  | AB de Villiers | 4414       | 104 | 42.442308     | 152.101999 |            |
| 9  | G Gambhir      | 4219       | 134 | 31.485075     | 124.088235 |            |
| 10 | AM Rahane      | 3834       | 117 | 32.769231     | 122.374721 |            |
| 11 | KD Karthik     | 3669       | 138 | 26.586957     | 130.430146 |            |
| 12 | SR Watson      | 3590       | 115 | 31.217391     | 139.906469 |            |
| 13 | AT Rayudu      | 3313       | 114 | 29.061404     | 126.643731 |            |
| 14 | YK Pathan      | 3222       | 110 | 29.290909     | 143.839286 |            |
| 15 | BB McCullum    | 2886       | 106 | 27.226415     | 132.082380 |            |
| 16 | PA Patel       | 2864       | 127 | 22.551181     | 121.768708 |            |
| 17 | MK Pandey      | 2855       | 95  | 30.052632     | 121.386054 |            |
| 18 | KA Pollard     | 2772       | 102 | 27.176471     | 147.525279 |            |
| 19 | Yuvraj Singh   | 2755       | 109 | 25.275229     | 129.891561 |            |
| 20 | V Sehwag       | 2728       | 98  | 27.836735     | 156.242841 |            |
| 21 | M Vijay        | 2589       | 93  | 27.838710     | 123.051331 |            |
| 22 | SE Marsh       | 2489       | 65  | 38.292308     | 133.386924 |            |
| 23 | JH Kallis      | 2427       | 89  | 27.269663     | 109.373592 |            |
| 24 | DR Smith       | 2385       | 81  | 29.444444     | 135.665529 |            |
| 25 | SR Tendulkar   | 2334       | 71  | 32.873239     | 120.123520 |            |
| 26 | SV Samson      | 2215       | 79  | 28.037975     | 130.832841 |            |
| 27 | R Dravid       | 2174       | 77  | 28.233766     | 115.823122 |            |
| 28 | AC Gilchrist   | 2069       | 76  | 27.223684     | 138.672922 |            |

Record with average less than 20 is:

Empty DataFrame  
Columns: [batsman, total\_runs, out, numberofballs, average, strikerate]  
Index: []

The dataset with deleted rows is:

|    | batsman        | total_runs | out | average   | strikerate |
|----|----------------|------------|-----|-----------|------------|
| 0  | V Kohli        | 5426       | 152 | 35.697368 | 131.087351 |
| 1  | SK Raina       | 5386       | 160 | 33.662500 | 137.538304 |
| 2  | RG Sharma      | 4902       | 161 | 30.447205 | 130.999466 |
| 3  | DA Warner      | 4717       | 114 | 41.377193 | 143.286756 |
| 4  | S Dhawan       | 4601       | 137 | 33.583942 | 125.538881 |
| 5  | CH Gayle       | 4525       | 110 | 41.136364 | 152.254374 |
| 6  | MS Dhoni       | 4450       | 118 | 37.711864 | 138.802246 |
| 7  | RV Uthappa     | 4420       | 156 | 28.333333 | 130.730553 |
| 8  | AB de Villiers | 4414       | 104 | 42.442308 | 152.101999 |
| 9  | G Gambhir      | 4219       | 134 | 31.485075 | 124.088235 |
| 10 | AM Rahane      | 3834       | 117 | 32.769231 | 122.374721 |
| 11 | KD Karthik     | 3669       | 138 | 26.586957 | 130.430146 |
| 12 | SR Watson      | 3590       | 115 | 31.217391 | 139.906469 |
| 13 | AT Rayudu      | 3313       | 114 | 29.061404 | 126.643731 |
| 14 | YK Pathan      | 3222       | 110 | 29.290909 | 143.839286 |
| 15 | BB McCullum    | 2886       | 106 | 27.226415 | 132.082380 |
| 16 | PA Patel       | 2864       | 127 | 22.551181 | 121.768708 |
| 17 | MK Pandey      | 2855       | 95  | 30.052632 | 121.386054 |
| 18 | KA Pollard     | 2772       | 102 | 27.176471 | 147.525279 |
| 19 | Yuvraj Singh   | 2755       | 109 | 25.275229 | 129.891561 |
| 20 | V Sehwag       | 2728       | 98  | 27.836735 | 156.242841 |
| 21 | M Vijay        | 2589       | 93  | 27.838710 | 123.051331 |
| 22 | SE Marsh       | 2489       | 65  | 38.292308 | 133.386924 |
| 23 | JH Kallis      | 2427       | 89  | 27.269663 | 109.373592 |
| 24 | DR Smith       | 2385       | 81  | 29.444444 | 135.665529 |
| 25 | SR Tendulkar   | 2334       | 71  | 32.873239 | 120.123520 |
| 26 | SV Samson      | 2215       | 79  | 28.037975 | 130.832841 |
| 27 | R Dravid       | 2174       | 77  | 28.233766 | 115.823122 |
| 28 | AC Gilchrist   | 2069       | 76  | 27.223684 | 138.672922 |

0s completed at 11:45PM

