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Batch : A3

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ASSIGNMENT-I

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

```
✓ [11] import pandas as pd  
1s  
{x} df=pd.read_csv('/content/dataset6.csv')  
batsman1=df.groupby('batsman')['strikerate'].sum().idxmax()  
print("The batsman with maximum strike rate is:",batsman1)
```

The batsman with maximum strike rate is: V Sehwag

b. Find the batsman who scored the minimum runs

```
✓ [12] batsman2=df.groupby('batsman')['total_runs'].min().idxmin()  
0s  
print("The batsman with minimum run score is:",batsman2)
```

The batsman with minimum run score is: AC Gilchrist

c. Find the average ball played by all the batsman

```
[13] 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()
```

The average of balls played by all the batsman is: 2604.896551724138

d. Find the all the records of batman who's strike rate is greater than 120

```
print("The batsman with minimum number of outs is:",batsman3)
print("Records with strike rate greater than 120 is:\n",
df[(df['strikerate']>120)])
```

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	131.987351
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	1943	32.873239	120.123520
26	SV Samson	2215	79	1693	28.037975	130.832841
28	AC Gilchrist	2069	76	1492	27.223684	138.672922

e. Find the all records who's average is below 20

```
✓ 1s ▶ print("Records with average less than 20 is:\n",  
df[(df['average']<20)])
```

Records with average less than 20 is:
Empty DataFrame
Columns: [batsman, total_runs, out, numberofballs, average, strikerate]
Index: []

f. Clean the dataset if record is empty with 0 values or delete incomplete data row

```
[18] df1=pd.read_csv('/content/dataset6.csv')
      df2=df1.dropna(axis=1)
      print("The dataset with deleted rows is:\n",df2)
```

```
[18] The dataset with deleted rows is:
```

	batsman	total_runs	out	numberofballs	average	strikerate
0	V Kohli	5426	152	4111	35.697368	131.987351
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
23	JH Kallis	2427	89	2219	27.269663	109.373592
24	DR Smith	2385	81	1758	29.444444	135.665529
25	SR Tendulkar	2334	71	1943	32.873239	120.123520
26	SV Samson	2215	79	1693	28.037975	130.832841
27	R Dravid	2174	77	1877	28.233766	115.823122
28	AC Gilchrist	2069	76	1492	27.223684	138.672922



0s

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8	AB de Villiers	4414	104	2902	42.442308	152.101999
9	G Gambhir	4219	134	3400	31.485075	124.088235
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