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Dataset:T20 Cricket Players

```
1.import pandas as pd df =

pd.read_csv("Players Data set.csv")

print(df)

Unnamed: 0 Player Span Mat Inns Not out Runs \
0 0 V Kohli (INDIA) 2010-2019 75 70 20 2633
1 1 RG Sharma (INDIA) 2007-2019 104 96 14 2633
2 2 MJ Guptill (NZ) 2009-2019 83 80 7 2436
3 3 Shoaib Malik (ICC/PAK) 2006-2019 111 104 30 2263
4 4 BB McCullum (NZ) 2005-2015 71 70 10 2140 ..
... ..
694 44 Abraash Khan (CAN) 2019-2019 7 4 0 66
695 45 PHKD Mendis (SL) 2018-2019 4 4 0 66
696 46 Waheed Ahmed (UAE) 2019-2019 10 9 4 66
697 47 J Bulele (Moz) 2019-2019 7 7 0 65
698 48 SC Kuggeleijn (NZ) 2019-2019 9 5 3 65

HS Ave ball faced SR 100 50 0 4s 6s Unnamed: 15
0 94* 52.66 1907 138.07 0 24 2 247 71 NaN
1 118 32.1 1905 138.21 4 19 6 234 120 NaN
2 105 33.36 1810 134.58 2 15 2 215 113 NaN
3 75 30.58 1824 124.06 0 7 1 186 61 NaN
4 123 35.66 1571 136.21 2 13 3 199 91 NaN .. ...
... ..
694 22 16.5 60 110.00 0 0 0 7 1 NaN
695 41 16.5 46 143.47 0 0 1 6 3 NaN
696 19 13.2 80 82.50 0 0 0 6 2 NaN
697 24 9.28 95 68.42 0 0 1 8 0 NaN
698 35* 32.5 30 216.66 0 0 1 4 6 NaN

[699 rows x 17 columns]
```

```
2.print(df[['Player','Span']])

Player Span
0 V Kohli (INDIA) 2010-2019
1 RG Sharma (INDIA) 2007-2019
2 MJ Guptill (NZ) 2009-2019
3 Shoaib Malik (ICC/PAK) 2006-2019
4 BB McCullum (NZ) 2005-2015 .. ...

694 Abraash Khan (CAN) 2019-2019
695 PHKD Mendis (SL) 2018-2019
696 Waheed Ahmed (UAE) 2019-2019
697 J Bulele (Moz) 2019-2019
698 SC Kuggeleijn (NZ) 2019-2019

[699 rows x 2 columns]
```

```
3.df.describe()
```

Unnamed: 0		Mat	Inns	Not out	Runs	ball faced	SR	100	50
699.000000	699.000000	699.000000	699.000000	699.000000	699.000000	699.000000	699.000000	699.000000	699.000000
24.464950	21.825465	18.506438	3.364807	00351.39	00285.86	00	0.078684	1.50643	
14.421703	19.675691	17.381721	4.204305	3419	8383	119.062189	0.352381	2.67770	
0.000000	2.000000	2.000000	0.000000	421.9340	322.5582	21.40390	0.000000	0.00000	
12.000000	8.000000	7.000000	1.000000	09	33	2	0.000000	0.00000	
24.000000	14.000000	12.000000	2.000000	65.00000	30.00000	63.70000	0.000000	1.00000	
				0	0	0			
				104.0000	96.00000	105.1050			
				00	000				

```
37.000000 29.000000 23.000000 5.000000 396.500000 318.500000 131.700000 0.000000 2.000000
```

```
49.000000 111.000000 104.000000 42.000000 2633.000000 1907.000000 239.280000 4.000000 24.000000
```

```
4.df.mean()
```

```
<ipython-input-4-c61f0c8f89b5>:1: FutureWarning: The default value of numeric_only in DataFrame.mean is deprecated. In a future ver
```

```
df.mean()
```

```
Unnamed: 0 24.464950
```

```
Mat 21.825465
```

```
Inns 18.506438
```

```
Not out 3.364807
```

```
Runs 351.393419
```

```
ball faced 285.868383 SR
```

```
119.062189
```

```
100 0.078684
```

```
50 1.506438
```

```
0 1.457797
```

```
4s 30.543634
```

```
6s 12.430615
```

```
Unnamed: 15 NaN
```

```
dtype: float64
```

```
5.df.medi(a)n
```

```
<ipython-input-6-6d467abf240d>:1: FutureWarning: The default value of numeric_only in DataFrame.median is deprecated. In a future v
```

```
df.median()
```

```
Unnamed: 0 24.00
```

```
Mat 14.00
```

```
I
```

```
Not out 2.00 nns 12.00
```

```
Runs 191.00
```

```
ball faced 161.00
```

```
SR 119.17
```

```
100 0.00
```

```
50 1.00
```

```
0 1.00
```

```
4 s 15.00
```

```
6 s 6.00
```

```
Unnamed: 15 NaN
```

```
dtype: float64
```

```
6.df.loc[ df [ "Mat" ] . max ()]
```

```
Unnamed: 0 11
```

```
Player DR Smith (WI)
```

```
Span 2006-2015
```

```
Mat 33
```

```
Inns 32
```

```
Not out 0
```

```
Runs 582
```

```
HS 72
```

```
Ave 18.18
```

```
ball faced 474
```

```
SR 122.78
```

```
100 0
```

```
50 3
```

```
0 1
```

```
4s 62
```

```
6s 31
```

```
Unnamed: 15 NaN
```

```
Name: 111, dtype: object
```

```
7.df["ball faced"].describe()
```

```
count 699.000000
```

```
mean 285.868383
```

```
std 322.558233
```

```
min 30.000000
```

```
25% 96.000000
```

```
50% 161.000000 75%
```

```
318.500000 max 1907.000000
```

```
Name: ball faced, dtype: float64
```

```
8.df.count()
```

```
Unnamed: 0 699
```

```
Player 699
```

```
Span 699
```

```
Mat 699
```

```
Inns 699
```

```
Not out 699
```

```
Runs 699
```

0	0.75	V Kohli 2010-20 (INDIA) 2019	2633	94*	52.66	1907	138.07	0	24	2	247	71
---	------	---------------------------------	------	-----	-------	------	--------	---	----	---	-----	----

	RG												
1	1 Sharma 104 120	2007-2019	96	14	2633	118	32.1	1905	138.21	4	19	6	234
	(INDIA)												
2	MJ Guptill 2009-2019	2009-2019	7	2436	105	33.36	1810	134.58	2	15	2	215	113
	Shoaib												
3	3 Malik 111 61	2006-2019	104	30	2263	75	30.58	1824	124.06	0	7	1	186
	(ICC/PAK)												
	BB												
4	4 McCullum 71 91	2005-2015	70	10	2140	123	35.66	1571	136.21	2	13	3	199
	(NZ)												
...	...												
...	Umar Gul 2007-2016	2007-2016	...	...	...	...	...	...	...	...	...	...	...
	(PAK)												
					379	29	60	27	9	165	32	9.16	156
					105.76	0	0	6	11	10			

```
11.print(df.iloc[:::-1])
```

```

Unnamed: 0 Player Span Mat Inns Not out Runs \
698 48 SC Kuggeleijn (NZ) 2019-2019 9 5 3 65
697 47 J Bulele (Moz) 2019-2019 7 7 0 65
696 46 Waheed Ahmed (UAE) 2019-2019 10 9 4 66
695 45 PHKD Mendis (SL) 2018-2019 4 4 0 66
694 44 Abraash Khan (CAN) 2019-2019 7 4 0 66 ..
... ..
4 4 BB McCullum (NZ) 2005-2015 71 70 10 2140
3 3 Shoaib Malik (ICC/PAK) 2006-2019 111 104 30 2263
2 2 MJ Guptill (NZ) 2009-2019 83 80 7 2436
1 1 RG Sharma (INDIA) 2007-2019 104 96 14 2633
0 0 V Kohli (INDIA) 2010-2019 75 70 20 2633
HS Ave ball faced SR 100 50 0 4s 6s Unnamed: 15
698 35* 32.5 30 216.66 0 0 1 4 6 NaN
697 24 9.28 95 68.42 0 0 1 8 0 NaN
696 19 13.2 80 82.50 0 0 0 6 2 NaN
695 41 16.5 46 143.47 0 0 1 6 3 NaN
694 22 16.5 60 110.00 0 0 0 7 1 NaN ..
... ..
4 123 35.66 1571 136.21 2 13 3 199 91 NaN
3 75 30.58 1824 124.06 0 7 1 186 61 NaN
2 105 33.36 1810 134.58 2 15 2 215 113 NaN
1 118 32.1 1905 138.21 4 19 6 234 120 NaN
0 94* 52.66 1907 138.07 0 24 2 247 71 NaN

[699 rows x 17 columns]
```

```
12.print(df.groupby('SR').count())
```

```

Unnamed: 0 Player Span Mat Inns Not out Runs HS Ave \
SR
63.70 1 1 1 1 1 1 1 1 1
66.66 1 1 1 1 1 1 1 1 1
68.42 1 1 1 1 1 1 1 1 1
70.19 1 1 1 1 1 1 1 1 1
72.00 1 1 1 1 1 1 1 1 1
... ..
190.56 1 1 1 1 1 1 1 1 1
190.82 1 1 1 1 1 1 1 1 1
205.76 1 1 1 1 1 1 1 1 1
216.66 1 1 1 1 1 1 1 1 1 239.28
1 1 1 1 1 1 1 1 1

ball faced 100 50 0 4s 6s Unnamed: 15 SR
63.70 1 1 1 1 1 1 0
66.66 1 1 1 1 1 1 0
68.42 1 1 1 1 1 1 0
70.19 1 1 1 1 1 1 0
72.00 1 1 1 1 1 1 0
... ..
190.56 1 1 1 1 1 1 0
190.82 1 1 1 1 1 1 0
205.76 1 1 1 1 1 1 0
216.66 1 1 1 1 1 1 0
239.28 1 1 1 1 1 1 0
```

[646 rows x 16 columns]

13.df.groupby('Not out').get_group(20)

Unnamed: 0		Player	Span	Mat	Inns	Not out	Runs	HS	Ave	ball faced	SR	100	50	0	4s	6s	Unnamed: 15	
0	0	V Kohli	2010-	75	70	20	2633	94*	52.66	1907	138.07	0	24	2	247	71	NaN	

14.df.head(20)

Unnamed: 0		Player	Span	Mat	Inns	Not out	Runs	HS	Ave	ball faced	SR	100	50	0	4s	6s	Unnamed: 15	
0		V Kohli	2010-075 70 20 (INDIA) 2019				2633	94*	52.66	1907	138.07	0	24	2	247	71		
1		RG Sharma	2007-1104 96 14 (INDIA) 2019				2633	118	32.1	1905	138.21	4	19	6	234	120		
2		MJ Guptill	2009-2 83 80 7 (NZ) 2019				2436	105	33.36	1810	134.58	2	15	2	215	113		
3		Shoaib Malik	2006-111 104 61 2019 (ICC/PAK)				30	2263	75	30.58	1824	124.06	0	7	1	186		
		BB																
4		4 McCullum	2005-71 70 91 2015 (NZ)				10	2140	123	35.66	1571	136.21	2	13	3	199		
5		DA Warner	2009-5 76 76 8 (AUS) 2019				2079	100*	30.57	1476	140.85	1	15	5	203	86		
		EJG																
		6 Morgan	2009-86 2019 (ENG)				84	17	2002	91	29.88	1475	135.72	0	11	3	151	96

15.df.tail(20)

Unnamed: 0		Player	Span	Mat	Inns	Not out	Runs	HS	Ave	ball faced	SR	100	50	0	4s	6s	Unnamed: 15	
7		7 Shahzad	2010-720 2018 (AFG)				3	1936	118*	31.22	1436	134.81	1	12	3	218		
		TB Sole	(AFG) 2019-29 9															
679		JP Duminy	2007-8 81 (SAJ) 2019				6	2	69	33*	17.25	43	160.46	0	0	0	9	1
8		30 Umanath	7 2019- PR Stirling				75	25	1934	96*	38.68	1532	126.24	0	11	6	138	71
680		9 (Mex) 72	(IRE) 2019				7	1	69	25	11.5	77	89.61		0	0	1	2
9		R Ankad	2019-31 Mohammad				71	6	1929	91	29.67	1401	137.68		0	16	8	233
		59	(Mex) 2006-2019															
681		10 Hafeez	89 2018 (PAKAG)				7	3	68	40*	17	72	94.44		0	0	2	7
10		32 Cremer	29 19 0 2018 (ZIM)				86	8	1908	86	24.46	1643	116.12		0	10	6	196
682		Dawlat	2012-33 Zadran				6		68		17	5.23	102		66.66	0	0	2
		6	2019 (AFG)				8		68		13	7.55	42		161.90	0	0	3
683																		

		TM											
684	34 Dowlin 20	2009-2010	2	1	68	37*	68	69	98.55	0	0	0	8
	(WI)												
685	35 5 4	R Escobar 2019- (Arg) 2019	1	68	28*	22.66	76	89.47	0	0	0	6	1
686	36 11 7	AR Patel 2015- (INDIA) 2018	3	68	20*	17	54	125.92	0	0	0	3	3
	Sikander												
687	37 Zulfiqar 11 0	2016-2019	8	1	68	18	9.71	68	100.00	0	0	0	5
	(NL)												
688	0 68 38 9.71 71	JNT Vare 2015- 38 8 7 (PNG) 2017						95.77	0	0	0	4	0
689	3 68 33 17 70	C Viljoen 2019- 39 12 7 (NAM) 2019						97.14	0	0	0	7	1

```
16.print(df.groupby('0').count())
```

```

Unnamed: 0 Player Span Mat Inns Not out Runs HS Ave ball faced \
0
0 255 255 255 255 255 255 255 255 255 255
1 177 177 177 177 177 177 177 177 177 177
2 127 127 127 127 127 127 127 127 127 127
3 62 62 62 62 62 62 62 62 62 62
4 38 38 38 38 38 38 38 38 38 38
5 15 15 15 15 15 15 15 15 15 15
6 15 15 15 15 15 15 15 15 15 15
7 2 2 2 2 2 2 2 2 2 2
8 4 4 4 4 4 4 4 4 4 4
9 1 1 1 1 1 1 1 1 1 1
10 3 3 3 3 3 3 3 3 3 3

```

```

SR 100 50 4s 6s Unnamed: 15
0
0 255 255 255 255 255 0
1 177 177 177 177 177 0
2 127 127 127 127 127 0
3 62 62 62 62 62 0
4 38 38 38 38 38 0
5 15 15 15 15 15 0
6 15 15 15 15 15 0
7 2 2 2 2 2 0
8 4 4 4 4 4 0
9 1 1 1 1 1 0
10 3 3 3 3 3 0

```

```
17.df['Span'].value_counts()
```

```

2019-2019 212
2015-2019 38
2018-2019 23
2016-2019 23
2012-2019 19
... 2006-2007
1
2007-2008 1
2013-2017 1
2016-2018 1
2015-2018 1
Name: Span, Length: 100, dtype: int64

```

```
18.df.loc[df['6s'].max()]
```

```

Unnamed: 0 20
Player RN ten Doeschate (NL)
Span 2008-2019
Mat 22
Inns 22
Not out 10
Runs 533
HS 59
Ave 44.41

```

```
ball faced 400 SR 133.25 100 0 50 3 0
1 4s 27 6s 19 Unnamed: 15 NaN
Name: 120, dtype: object
```

```
19.df['Player']
```

```
0 V Kohli (INDIA)
1 RG Sharma (INDIA)
2 MJ Guptill (NZ)
3 Shoaib Malik (ICC/PAK)
4 BB McCullum (NZ) ...
694 Abraash Khan (CAN)
695 PHKD Mendis (SL)
696 Waheed Ahmed (UAE)
697 J Bulele (Moz)
698 SC Kuggeleijn (NZ)
Name: Player, Length: 699, dtype: object
```

```
20.df['6s'].max()
```

```
120
```

```
21.df.loc[df['Mat']>70]
```

Unnamed: 0		Player	Span	Mat	Inns	Not out	Runs	HS	Ave	ball faced	SR	100	50	0	4
0	0	V Kohli (INDIA)	2010-2019	75	70	20	2633	94*	52.66	1907	138.07	0	24	2	24
1	1	RG Sharma (INDIA)	2007-2019	104	96	14	2633	118	32.1	1905	138.21	4	19	6	23
2	2	MJ Guptill (NZ)	2009-2019	83	80	7	2436	105	33.36	1810	134.58	2	15	2	21
3	3	Shoaib Malik (ICC/PAK)	2006-2019	111	104	30	2263	75	30.58	1824	124.06	0	7	1	18
4	4	BB McCullum (NZ)	2005-2015	71	70	10	2140	123	35.66	1571	136.21	2	13	3	19
5	5	DA Warner (AUS)	2009-2019	76	76	8	2079	100*	30.57	1476	140.85	1	15	5	20
6	6	EJG Morgan (ENG)	2009-2019	86	84	17	2002	91	29.88	1475	135.72	0	11	3	15
8	8	JP Duminy (SA)	2007-2019	81	75	25	1934	96*	38.68	1532	126.24	0	11	6	13
9	9	PR Stirling (IRE)	2009-2019	72	71	6	1929	91	29.67	1401	137.68	0	16	8	23
10	10	Mohammad Hafeez (PAK)	2006-2018	89	86	8	1908	86	24.46	1643	116.12	0	10	6	19
11	11	TM Dilshan (SL)	2006-2016	80	79	12	1889	104*	28.19	1567	120.54	1	13	10	22
13	13	LRPL Taylor (NZ)	2006-2019	95	87	19	1743	63	25.63	1430	121.88	0	5	5	11
14	14	Umar Akmal (PAK)	2009-2019	84	79	14	1690	94	26	1377	122.73	0	8	10	12
15	15	AB de Villiers (SA)	2006-2017	78	75	11	1672	79*	26.12	1237	135.16	0	10	5	14
19	19	MS Dhoni (INDIA)	2006-2019	98	85	42	1617	56	37.6	1282	126.13	0	2	1	11
20	20	Tamim Iqbal (BDESH/ICC/World)	2007-2018	75	75	5	1613	103*	23.04	1383	116.63	1	6	6	17
22	22	SK Raina (INDIA)	2006-2018	78	66	11	1605	101	29.18	1190	134.87	1	5	3	14
24	24	Shakib Al Hasan (BDESH)	2006-2019	76	76	10	1567	84	23.74	1266	123.77	0	9	5	16
28	28	KJ O'Brien (IRE)	2008-2019	90	83	10	1504	124	20.6	1124	133.80	1	3	10	11
32	32	Mahmudullah (BDESH)	2007-2019	83	76	16	1430	64*	23.83	1166	122.64	0	4	2	11

✓ 0s completed at 8:04 PM

● ✕