In [1]:
```python
import pandas as pd
import numpy as np
```

In [2]:
```python
mdf = pd.read_csv('C:\\Users\\Smital Bhalerao\\Desktop\\matches.csv')
```

In [3]:
```python
df = pd.read_csv('C:\\Users\\Smital Bhalerao\\Desktop\\deliveries.csv')
```

In [4]:
```python
df.head(1)
```

Out[4]:

	match_id	inning	batting_team	bowling_team	over	ball	batsman	non_striker	bowler	is_super_over	...	bye_runs	legbye_runs	no
0	1	1	Sunrisers Hyderabad	Royal Challengers Bangalore	1	1	DA Warner	S Dhawan	TS Mills	0	...	0	0	0

1 rows × 21 columns

In [5]:
```python
matchID = 1
```

In [6]:
```python
df = df[(df.match_id == 1) & (df.inning == 2)]
```

In [7]:
```python
df.player_dismissed.unique()
```

Out[7]:
```
array([nan, 'Mandeep Singh', 'CH Gayle', 'KM Jadhav', 'TM Head',
       'Sachin Baby', 'STR Binny', 'SR Watson', 'S Aravind', 'TS Mills',
       'YS Chahal'], dtype=object)
```

In [8]:
```python
players = list(df.batsman.unique())
```

In [9]: `players`

Out[9]:
```
['CH Gayle',
 'Mandeep Singh',
 'TM Head',
 'KM Jadhav',
 'SR Watson',
 'Sachin Baby',
 'STR Binny',
 'S Aravind',
 'YS Chahal',
 'TS Mills',
 'A Choudhary']
```

In [10]:
```python
runs_ls = []
balls_ls = []

for player in players:
    temp_df = df[df.batsman == player]

    if len(temp_df) > 0:
        runs_ls.append(sum(temp_df.batsman_runs))
        balls_ls.append(len(temp_df))
    else:
        runs_ls.append(0)
        balls_ls.append(0)
```

In [11]:
```python
players_dismissed = list(df.player_dismissed.unique())
```

In [12]:
```python
df.dismissal_kind.unique()
```

Out[12]: `array([nan, 'bowled', 'caught', 'run out'], dtype=object)`

In [13]:
```python
out_no_ls = []
fielder_ls = []
bowler_ls = []

for player in players:
    if player in players_dismissed:
        out_no_ls.append('out')
        temp_df = df[df.player_dismissed == player]
        out_type = temp_df['dismissal_kind'].item()

        if out_type == 'caught':
            fielder_ls.append(temp_df['fielder'].item())
            bowler_ls.append(temp_df['bowler'].item())
        elif out_type == 'bowled':
            fielder_ls.append('')
            bowler_ls.append(temp_df['bowler'].item())
        else:
            fielder_ls.append('runout' + '(' + str(temp_df['fielder'].item()) + ')')
            bowler_ls.append('')

    else:
        out_no_ls.append('no')
        fielder_ls.append('')
        bowler_ls.append('')
```

```
In [14]: out_no_ls, fielder_ls, bowler_ls
```

```
Out[14]: (['out', 'out', 'out', 'out', 'out', 'out', 'out', 'out', 'out', 'out', 'no'],
          ['DA Warner',
           '',
           'Yuvraj Singh',
           'runout(BCJ Cutting)',
           'MC Henriques',
           'MC Henriques',
           'Yuvraj Singh',
           '',
           'runout(CJ Jordan (sub))',
           'DA Warner',
           ''],
          ['DJ Hooda',
           'Rashid Khan',
           'Rashid Khan',
           '',
           'A Nehra',
           'Bipul Sharma',
           'B Kumar',
           'A Nehra',
           '',
           'B Kumar',
           ''])
```

```
In [15]: runs_balls_list = []

         for i in range(len(players)):
             if out_no_ls[i] == 'no':
                 runs_balls_list.append( str(runs_ls[i]) + '*' + ' (' + str(balls_ls[i]) + ' ) ')
             else:
                 runs_balls_list.append( str(runs_ls[i]) + ' (' + str(balls_ls[i]) + ' ) ')
```

In [16]:
```python
for i in range(len(players)):
    print(players[i], ' ', fielder_ls[i], bowler_ls[i], runs_balls_list[i])
```

```
CH Gayle    DA Warner DJ Hooda 32 (23 )
Mandeep Singh     Rashid Khan 24 (16 )
TM Head    Yuvraj Singh Rashid Khan 30 (22 )
KM Jadhav    runout(BCJ Cutting)  31 (18 )
SR Watson    MC Henriques A Nehra 22 (17 )
Sachin Baby   MC Henriques Bipul Sharma 1 (3 )
STR Binny    Yuvraj Singh B Kumar 11 (10 )
S Aravind    A Nehra 0 (2 )
YS Chahal    runout(CJ Jordan (sub))  3 (7 )
TS Mills    DA Warner B Kumar 6 (3 )
A Choudhary      6* (2 )
```

In [17]:
```python
scorecard_dict = {'player':players, 'fielder':fielder_ls, 'bowler':bowler_ls, 'runs':runs_balls_list}
```

In [18]:
```python
pd.DataFrame(scorecard_dict)
```

Out[18]:

	player	fielder	bowler	runs
0	CH Gayle	DA Warner	DJ Hooda	32 (23)
1	Mandeep Singh		Rashid Khan	24 (16)
2	TM Head	Yuvraj Singh	Rashid Khan	30 (22)
3	KM Jadhav	runout(BCJ Cutting)		31 (18)
4	SR Watson	MC Henriques	A Nehra	22 (17)
5	Sachin Baby	MC Henriques	Bipul Sharma	1 (3)
6	STR Binny	Yuvraj Singh	B Kumar	11 (10)
7	S Aravind		A Nehra	0 (2)
8	YS Chahal	runout(CJ Jordan (sub))		3 (7)
9	TS Mills	DA Warner	B Kumar	6 (3)
10	A Choudhary			6* (2)

```
In [19]: scorecard_df = pd.DataFrame(scorecard_dict)
```

```
In [20]: ## scorecard_df.to_csv('scorecard.csv')
```