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In [2]: import pandas as pd
dataset = pd.read_csv('ipl11.csv')
X = dataset.iloc[:,[7,8,9,12,13]].values #Input features
y = dataset.iloc[:, 14].values #Label
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In [3]: X
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Out[3]: array([[1.00e+00, 0.00e+00, 1.00e-01, 0.00e+00, 0.00e+00],
               [1.00e+00, 0.00e+00, 2.00e-01, 0.00e+00, 0.00e+00],
               [2.00e+00, 0.00e+00, 2.00e-01, 0.00e+00, 0.00e+00],
               ...,
               [1.28e+02, 7.00e+00, 1.94e+01, 4.70e+01, 1.20e+01],
               [1.29e+02, 7.00e+00, 1.95e+01, 4.70e+01, 1.30e+01],
               [1.29e+02, 8.00e+00, 1.96e+01, 4.70e+01, 1.30e+01]])
```

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In [4]: y
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Out[4]: array([222, 222, 222, ..., 129, 129, 129], dtype=int64)
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In [5]: from sklearn.model_selection import train_test_split
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size = 0.25, ra
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In [6]: from sklearn.preprocessing import StandardScaler
sc = StandardScaler()
X_train = sc.fit_transform(X_train)
X_test = sc.transform(X_test)
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In [7]: from sklearn.linear_model import LinearRegression
lin = LinearRegression()
lin.fit(X_train,y_train)
```

```
Out[7]: ▼ LinearRegression
LinearRegression()
```

```
In [10]: from sklearn.ensemble import RandomForestRegressor
lin = RandomForestRegressor(n_estimators=100,max_features=None)
lin.fit(X_train,y_train)
```

```
Out[10]: ▼ RandomForestRegressor
RandomForestRegressor(max_features=None)
```

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In [11]: def custom_accuracy(y_test,y_pred,threshld):  
         right = 0  
         l = len(y_pred)  
         for i in range(0,l):  
             if(abs(y_pred[i]-y_test[i]) <= threshld):  
                 right += 1  
         return ((right/l)*100)
```

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In [12]: y_pred = lin.predict(X_test)  
         score = lin.score(X_test,y_test)*100  
         print("R-squared value:" , score)  
         print("Custom accuracy:" , custom_accuracy(y_test,y_pred,10))
```

R-squared value: 67.28345866738808
Custom accuracy: 65.49673752894127

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In [13]: import numpy as np  
         new_prediction = lin.predict(sc.transform(np.array([[100,0,13,50,50]])))  
         print("Prediction score:" , new_prediction)
```

Prediction score: [173.94]


```

In [14]: import random
team1 = input("Enter the First team: ")
team2 = input("Enter the second team: ")

team_playing = input("Who is doing batting: ")
if team_playing.upper() == team1.upper() or team_playing.upper() == team2.uppe
    pass
else:
    print("You written the team that is not playing")
    quit()

is_match_started = input("Is Match Started[Y/N]: ")
is_match_started = is_match_started.upper()

while True:
    if is_match_started.upper() == 'Y' or is_match_started.upper() == 'N':
        break
    print("Wrong Input Please Try Again")
    is_match_started = input("Is Match Started[Y/N]: ")
    is_match_started = is_match_started.upper()

if is_match_started == 'Y':
    overs = int(
        input("Please tell how many overs completed(only over not balls): "))
    if overs >= 20:
        print("I think you late")
        quit()
    runs = int(input("Please tell how many run are(according to full over): "))
    wickets = int(input("Please tell how many wickets are taken: "))
    if wickets >= 10:
        print(f"10 wickets are over {team_playing} made {runs} runs")
        quit()
    if wickets < 0:
        print("What a joke")
        quit()
    rr = runs / overs
    print(f"Hmm.... Run rate at this time is {rr}")
    low_or_sum_rpo = [1, 0.5, 0.1, 0.8, 0.45, 0.68]
    neg_or_pos = random.randint(0, 1)
    rpo_changer = random.randint(0, len(low_or_sum_rpo))
    rpo_changer = low_or_sum_rpo[rpo_changer]
    if neg_or_pos == 0:
        rr - rpo_changer
    elif neg_or_pos == 1:
        rr + rpo_changer

    if overs <= 0:
        print("Please tell after 1 over")
    else:
        if wickets <= 3:
            if (overs < 9 and rr > 9) or (overs >= 9):
                predict = int(rr * 20)
                print(
                    f"I think they will make between {predict - 3} - {predict
            else:
                print(f"{team_playing} are slow but may beat after some overs:
                sum_rpo = [1, 2, 0.5, 0.8, -0.1, -0.3]

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        rpo_changer = random.randint(0, len(sum_rpo))
        rpo_changer = sum_rpo[rpo_changer]
        rr += rpo_changer
        predict = int(rr * 20)
        print(
            f"I think they can make between {predict - 3} - {predict + 3}"
        )
    elif wickets > 3 and wickets <= 7:
        to_minus = random.randint(9, 24)
        if (overs < 9 and rr > 9) or (overs >= 9):
            predict = int(rr * 20) - to_minus
            print(
                f"I think they will make between {predict - 3} - {predict + 3}"
            )
        else:
            print(f"{team_playing} are slow but may beat after some overs:")
            sum_rpo = [1, 2, 0.5, 0.8, -0.1, -0.3]
            rpo_changer = random.randint(0, len(sum_rpo))
            rpo_changer = sum_rpo[rpo_changer]
            rr += rpo_changer
            predict = int(rr * 20) - to_minus
            print(
                f"I think they can make between {predict - 3} - {predict + 3}"
            )
    elif wickets > 7:
        to_minus = random.randint(18, 40)
        if (overs < 9 and rr > 9) or (overs >= 9):
            predict = int(rr * 20) - to_minus
            print(
                f"I think they will make between {predict - 3} - {predict + 3}"
            )
        else:
            print(f"{team_playing} are slow but may beat after some overs:")
            sum_rpo = [1, 2, 0.5, 0.8, -0.1, -0.3]
            rpo_changer = random.randint(0, len(sum_rpo))
            rpo_changer = sum_rpo[rpo_changer]
            rr += rpo_changer
            predict = int(rr * 20) - to_minus
            print(
                f"I think they can make between {predict - 3} - {predict + 3}"
            )
    elif is_match_started == 'N':
        print("Please come after started match")

```

```
Enter the First team: a
Enter the second team: b
Who is doing batting: f
You written the team that is not playing
Is Match Started[Y/N]: c
Wrong Input Please Try Again
Is Match Started[Y/N]: d
Wrong Input Please Try Again
Is Match Started[Y/N]: d
Wrong Input Please Try Again
Is Match Started[Y/N]: d
Wrong Input Please Try Again
Is Match Started[Y/N]: y
Please tell how many overs completed(only over not balls): 5
Please tell how many run are(according to full over): 50
Please tell how many wickets are taken: 2
Hmm.... Run rate at this time is 10.0
I think they will make between 197 - 203
```

In []: