

What is Colab?

Colab, or "Colaboratory", allows you to write and execute Python in your browser, with

- Zero configuration required
- · Access to GPUs free of charge
- Easy sharing

Whether you're a **student**, a **data scientist** or an **AI researcher**, Colab can make your work easier. Watch <u>Introduction to Colab</u> or <u>Colab Features You May Have Missed</u> to learn more, or just get started below!

Getting started

The document you are reading is not a static web page, but an interactive environment called a **Colab notebook** that lets you write and execute code.

For example, here is a **code cell** with a short Python script that computes a value, stores it in a variable, and prints the result:

```
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
from sklearn.model_selection import train_test_split
from sklearn.ensemble import RandomForestClassifier
from sklearn.metrics import accuracy_score

df = pd.read_csv("/archive (7).zip")

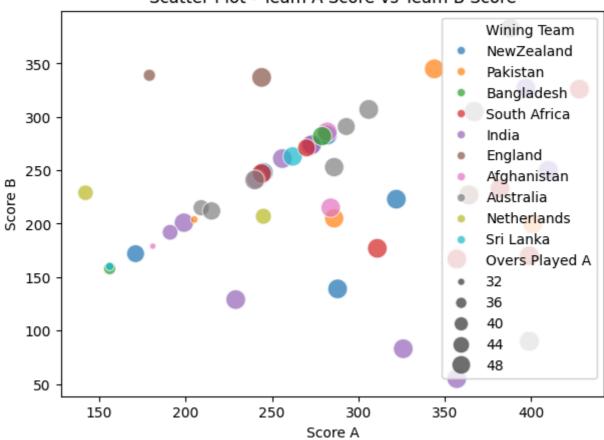
from google.colab import drive
drive.mount('/content/drive')
```

Mounted at /content/drive

```
print("Shape of dataset:", df.shape)
→ Shape of dataset: (48, 44)
print(df.head())
                                                                         Stadium \
\rightarrow
        Match ID Match Date Match Time
                                                City
     0
                 05-10-2023
                                2:00 PM
                                           Ahmedabad
                                                          Narendra Modi Stadium
               1
     1
               2 06-10-2023
                                2:00 PM
                                           Hyderabad
                                                                    Eden Gardens
     2
                                                                    HPCA Stadium
               3 07-10-2023
                                2:00 PM Dharamshala
     3
               4 07-10-2023
                                2:00 PM
                                               Delhi
                                                            Arun Jaitley Stadium
     4
               5 08-10-2023
                                             Chennai M. A. Chidambaram Stadium
                                2:00 PM
                           Team B Toss Winner Toss Decision Score A
              Team A
     0
                       NewZealand NewZealand
                                                       Field
             England
                                                                   282
                                                                        . . .
     1
            Pakistan Netherlands Netherlands
                                                       Field
                                                                   286
                                                                       . . .
     2
                       Bangladesh
                                   Bangladesh
                                                                   156
         Afghanistan
                                                       Field
     3 South Africa
                        Sri Lanka
                                     Sri Lanka
                                                       Field
                                                                   428
           Australia
                            India
                                     Australia
                                                         Bat
                                                                   199
                                                                       . . .
        No Balls B Penalty B Extras B
                                          Wining Team
                                                          Margin \
     0
                            0
                                      6
                                           NewZealand 9 Wickets
     1
                            0
                                      9
                                             Pakistan
                                                         81 Runs
                 1
     2
                 0
                            0
                                      8
                                           Bangladesh 6 Wickets
                                     23 South Africa
     3
                 1
                            0
                                                        102 Runs
                                                India 6 wickets
     4
                 0
                            a
                                     12
          Man of the Match
                                       Umpire 1
                                                               Umpire 2 \
     0
           Rachin Ravindra
                               Kumar Dharmasena
                                                            Nitin Menon
     1
              Saud Shakeel
                               Adrian Holdstock
                                                            Chris Brown
     2 Mehidy Hasan Miraz
                                    Joel Wilson
                                                      Kumar Dharmasena
     3
             Aiden Markram Richard Illingworth
                                                          Sharfuddoula
     4
                  KL Rahul
                                 Chris Gaffaney Richard Kettleborough
            TV Umpire
                            Match Refree
     0
          Paul Wilson
                         Javagal Srinath
     1
           Rod Tucker
                              Jeff Crowe
     2
           Ahsan Raza
                            Andy Pycroft
                         Javagal Srinath
       Michael Gough
          Chris Brown Richie Richardson
     [5 rows x 44 columns]
# Scatter Plot - Score A vs Score B (Bubble = Overs Played A, Hue = Wining Team)
plt.figure(figsize=(7,5))
sns.scatterplot(
    x="Score A", y="Score B",
    hue="Wining Team",
    size="Overs Played A",
    sizes=(20,200), data=df, alpha=0.7
)
plt.title("Scatter Plot - Team A Score vs Team B Score")
plt.show()
```



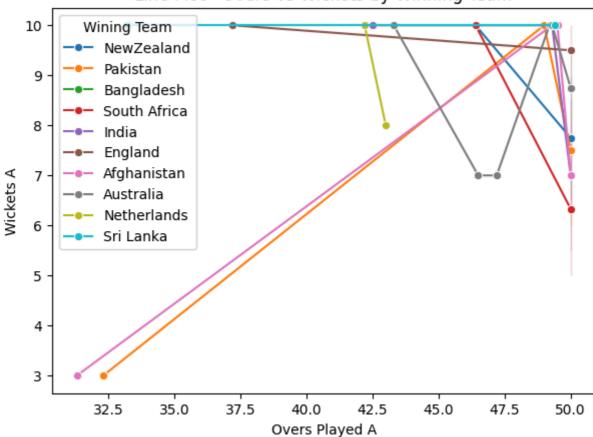
Scatter Plot - Team A Score vs Team B Score



```
# Line Plot - Overs Played A vs Wickets A by Winning Team
plt.figure(figsize=(7,5))
sns.lineplot(
    x="Overs Played A", y="Wickets A",
    hue="Wining Team", data=df, marker="o"
)
plt.title("Line Plot - Overs vs Wickets by Winning Team")
plt.show()
```



Line Plot - Overs vs Wickets by Winning Team



```
# Bar Plot - Avg Score A by Winning Team
plt.figure(figsize=(10,6))
sns.barplot(
    x="Wining Team", y="Score A",
    data=df, ci="sd", palette="Set2"
)
plt.title("Bar Plot - Avg Score A by Winning Team")
plt.xticks(rotation=45)
plt.show()
```

→ /1

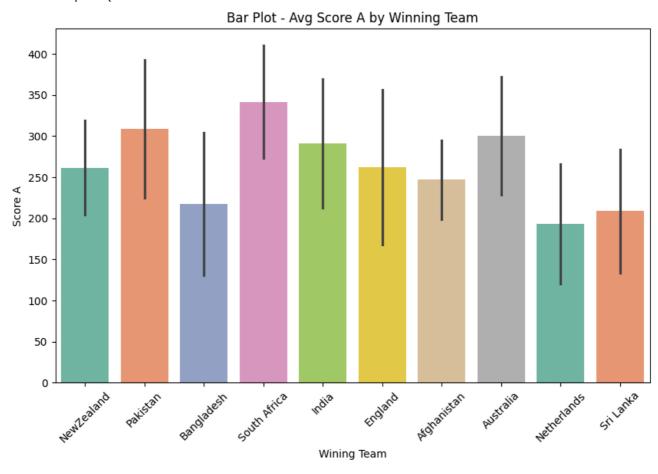
/tmp/ipython-input-2526408709.py:3: FutureWarning:

The `ci` parameter is deprecated. Use `errorbar='sd'` for the same effect.

```
sns.barplot(
/tmp/ipython-input-2526408709.py:3: FutureWarning:
```

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.

sns.barplot(



```
# Histogram Plots
numeric_cols = ["Score A", "Score B", "Wickets A", "Wickets B"
plt.figure(figsize=(12,8))

for i, col in enumerate(numeric_cols, 1):
    plt.subplot(2, 2, i)
    sns.histplot(df[col], bins=10, kde=True, color="skyblue")
    plt.title(f"Histogram of {col}")
```

plt.tight_layout()

