

Establishing a Database Connection with Python

```
In [1]: !pip install mysql-connector-python
```

Requirement already satisfied: mysql-connector-python in c:\users\navna\anaconda3\anaconda\anacondadbda\lib\site-packages (8.0.29)
Requirement already satisfied: protobuf>=3.0.0 in c:\users\navna\anaconda3\anaconda\anacondadbda\lib\site-packages (from mysql-connector-python) (4.21.2)

```
In [2]: !pip install mysql-connector-python
```

```
import mysql.connector  
database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022")  
print(database)
```

Requirement already satisfied: mysql-connector-python in c:\users\navna\anaconda3\anaconda\anacondadbda\lib\site-packages (8.0.29)
Requirement already satisfied: protobuf>=3.0.0 in c:\users\navna\anaconda3\anaconda\anacondadbda\lib\site-packages (from mysql-connector-python) (4.21.2)
<mysql.connector.connection_cext.CMySQLConnection object at 0x00000225C87AF250>

Problem Statement

CASE:- Cricket player Database System

TABLE:-

India_1st_Inning

England_1st_Inning

India_2nd_Inning

England_2nd_Inning

FIELDS:- Batting,Runs,Balls,4s,6s,S_R

```
In [4]: print("CASE:- Cricket player Database System")
```

CASE:- Cricket player Database System

create database

```
In [5]: !pip install mysql-connector-python
import mysql.connector
database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022")
cursor=database.cursor()
cursor.execute("create database India_vs_England")
```

Requirement already satisfied: mysql-connector-python in c:\users\navna\anaconda3\anaconda\anacondadbda\lib\site-packages (8.0.29)

Requirement already satisfied: protobuf>=3.0.0 in c:\users\navna\anaconda3\anaconda\anacondadbda\lib\site-packages (from mysql-connector-python) (4.21.2)

show database

```
In [6]: !pip install mysql-connector-python
import mysql.connector
database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022")
cursor=database.cursor()
cursor.execute("show databases")
for i in cursor:
    print(i)
```

```
Requirement already satisfied: mysql-connector-python in c:\users\navna\anaconda3\anaconda\anacondadbda\lib\site-packages (8.0.29)
Requirement already satisfied: protobuf>=3.0.0 in c:\users\navna\anaconda3\anaconda\anacondadbda\lib\site-packages (from mysql-connector-p
ython) (4.21.2)
('cdac',)
('hotel_management_system',)
('india_vs_england',)
('information_schema',)
('mysql',)
('performance_schema',)
('sakila',)
('sys',)
('world',)
```

create table

```
In [7]: print("TABLE:- India_1st_Innings")
print("FIELDS:- Batting, Runs, Balls, 4s, 6s, S_R")
```

```
TABLE:- India_1st_Innings
FIELDS:- Batting, Runs, Balls, 4s, 6s, S_R
```

```
In [8]: !pip install mysql-connector-python
import mysql.connector
database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_e
cursor=database.cursor()
cursor.execute("create table India_1st_Inning(player varchar(30),Runs int,Balls int,4s int,6s int,S_R float)
```

Requirement already satisfied: mysql-connector-python in c:\users\navna\anaconda3\anaconda\anacondadbda\lib\site-packages (8.0.29)
Requirement already satisfied: protobuf>=3.0.0 in c:\users\navna\anaconda3\anaconda\anacondadbda\lib\site-packages (from mysql-connector-p
ython) (4.21.2)

```
In [9]: print("TABLE:- England_1st_Innings")
print("FIELDS:- Batting, Runs, Balls, 4s, 6s, S_R")
```

TABLE:- England_1st_Innings
FIELDS:- Batting, Runs, Balls, 4s, 6s, S_R

```
In [10]: !pip install mysql-connector-python
import mysql.connector
con=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_england")
cur=con.cursor()
cur.execute("create table England_1st_Inning(player varchar(30),Runs int,Balls int,4s int,6s int,S_R float)")
```

Requirement already satisfied: mysql-connector-python in c:\users\navna\anaconda3\anaconda\anacondadbda\lib\site-packages (8.0.29)
Requirement already satisfied: protobuf>=3.0.0 in c:\users\navna\anaconda3\anaconda\anacondadbda\lib\site-packages (from mysql-connector-p
ython) (4.21.2)

```
In [11]: print("TABLE:- India_2nd_Innings")
print("FIELDS:- Batting, Runs, Balls, 4s, 6s, S_R")
```

```
TABLE:- India_2nd_Innings
FIELDS:- Batting, Runs, Balls, 4s, 6s, S_R
```

```
In [12]: !pip install mysql-connector-python
import mysql.connector
database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_
cursor=database.cursor()
cursor.execute("create table India_2nd_Inning(player varchar(30),Runs int,Balls int,4s int,6s int,S_R float")
```

```
Requirement already satisfied: mysql-connector-python in c:\users\navna\anaconda3\anaconda\anacondadbda\lib\site-packages (8.0.29)
Requirement already satisfied: protobuf>=3.0.0 in c:\users\navna\anaconda3\anaconda\anacondadbda\lib\site-packages (from mysql-connector-p
ython) (4.21.2)
```

```
In [13]: print("TABLE:- England_2nd_Innings")
print("FIELDS:- Batting, Runs, Balls, 4s, 6s, S_R")
```

```
TABLE:- England_2nd_Innings
FIELDS:- Batting, Runs, Balls, 4s, 6s, S_R
```

```
In [14]: !pip install mysql-connector-python
import mysql.connector
database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_
cursor=database.cursor()
cursor.execute("create table England_2nd_Inning(player varchar(30),Runs int,Balls int,4s int,6s int,S_R floi
```

Requirement already satisfied: mysql-connector-python in c:\users\navna\anaconda3\anaconda\anacondadbda\lib\site-packages (8.0.29)
Requirement already satisfied: protobuf>=3.0.0 in c:\users\navna\anaconda3\anaconda\anacondadbda\lib\site-packages (from mysql-connector-p
ython) (4.21.2)

show table

```
In [15]: !pip install mysql-connector-python
import mysql.connector
database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_
cursor=database.cursor()
cursor.execute("show tables")
for i in cursor:
    print(i)
```

Requirement already satisfied: mysql-connector-python in c:\users\navna\anaconda3\anaconda\anacondadbda\lib\site-packages (8.0.29)
Requirement already satisfied: protobuf>=3.0.0 in c:\users\navna\anaconda3\anaconda\anacondadbda\lib\site-packages (from mysql-connector-p
ython) (4.21.2)
('england_1st_inning',)
('england_2nd_inning',)
('india_1st_inning',)
('india_2nd_inning',)

India_1st Innings

inserting data to the table

```
In [16]: database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_australia")
cursor=database.cursor()
sql="insert into india_1st_inning(player,Runs,Balls,4s,6s,S_R)values(%s,%s,%s,%s,%s,%s)"
player1=('Shubman Gill',17,24,4,0,70.83)
cursor.execute(sql,player1)
database.commit()
```

```
In [17]: database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_australia")
cursor=database.cursor()
sql="insert into india_1st_inning(player,Runs,Balls,4s,6s,S_R)values(%s,%s,%s,%s,%s,%s)"
player1=[('Cheteswar Pujara',13,46,2,0,28.26),
          ('Hanuma Vihari',20,53,1,0,37.74),
          ('Virat Kohli',11,19,2,0,57.89),
          ('Rishabh Pant',146,111,19,4,131.53),
          ('Shreyas Iyer',15,11,3,0,136.36),
          ('Ravindra Jadeja',104,194,13,0,53.61),
          ('Shardul Thakur',1,12,0,0,8.33),
          ('Mohammed Shami',16,31,3,0,51.61),
          ('Jasprit Bumrah',31,16,4,2,193.75),
          ('Mohammed Siraj',2,6,0,0,33.33),
          ('Extras',40,0,0,0,00.00)
        ]
cursor.executemany(sql,player1)
database.commit()
```

```
In [18]: print("India 1st_inning")
database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_australia")
cursor=database.cursor()
cursor.execute("select * from india_1st_inning")
cursor.fetchall()
```

India 1st_inning

```
[('Shubman Gill', 17, 24, 4, 0, 70.83),
 ('Cheteswar Pujara', 13, 46, 2, 0, 28.26),
 ('Hanuma Vihari', 20, 53, 1, 0, 37.74),
 ('Virat Kohli', 11, 19, 2, 0, 57.89),
 ('Rishabh Pant', 146, 111, 19, 4, 131.53),
 ('Shreyas Iyer', 15, 11, 3, 0, 136.36),
 ('Ravindra Jadeja', 104, 194, 13, 0, 53.61),
 ('Shardul Thakur', 1, 12, 0, 0, 8.33),
 ('Mohammed Shami', 16, 31, 3, 0, 51.61),
 ('Jasprit Bumrah', 31, 16, 4, 2, 193.75),
 ('Mohammed Siraj', 2, 6, 0, 0, 33.33),
 ('Extras', 40, 0, 0, 0, 0.0)]
```

```
In [19]: print("India 1st_inning runs")
database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_australia")
cursor=database.cursor()
cursor.execute("select SUM(Runs),SUM(4s),SUM(6s) from india_1st_inning")
cursor.fetchone()
```

India 1st_inning runs

```
(Decimal('416'), Decimal('51'), Decimal('6'))
```


England_1st_Innings

```
In [20]: database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_India")
cursor=database.cursor()
sql="insert into england_1st_inning(player,Runs,Balls,4s,6s,S_R)values(%s,%s,%s,%s,%s,%s)"
player1=[('Alex Lees',6,9,1,0,66.67),
          ('Zak Crawley',9,17,1,0,52.94),
          ('Ollie Pope',10,18,2,0,55.56),
          ('Joe Root',31,67,4,0,46.27),
          ('Jonny Bairstow',106,140,14,2,75.71),
          ('Jack Leach',0,5,0,0,0.00),
          ('Ben Stokes',25,36,3,0,69.44),
          ('Sam Billings',36,57,4,0,63.16),
          ('Stuart Broad',1,5,0,0,20.00),
          ('Matthew Potts',19,18,3,1,105.56),
          ('James Anderson',6,10,1,0,60.00),
          ('Extras',35,0,0,0,00.00)
        ]
cursor.executemany(sql,player1)
database.commit()
```

```
In [21]: print("England 1st_inning Scorecard")
database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_")
cursor=database.cursor()
cursor.execute("select * from england_1st_inning")
cursor.fetchall()
```

England 1st_inning Scorecard

```
[('Alex Lees', 6, 9, 1, 0, 66.67),
 ('Zak Crawley', 9, 17, 1, 0, 52.94),
 ('Ollie Pope', 10, 18, 2, 0, 55.56),
 ('Joe Root', 31, 67, 4, 0, 46.27),
 ('Jonny Bairstow', 106, 140, 14, 2, 75.71),
 ('Jack Leach', 0, 5, 0, 0, 0.0),
 ('Ben Stokes', 25, 36, 3, 0, 69.44),
 ('Sam Billings', 36, 57, 4, 0, 63.16),
 ('Stuart Broad', 1, 5, 0, 0, 20.0),
 ('Matthew Potts', 19, 18, 3, 1, 105.56),
 ('James Anderson', 6, 10, 1, 0, 60.0),
 ('Extras', 35, 0, 0, 0, 0.0)]
```

```
In [22]: print("England 1st_inning runs")
database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_")
cursor=database.cursor()
cursor.execute("select SUM(Runs),SUM(4s),SUM(6s) from england_1st_inning")
cursor.fetchone()
```

England 1st_inning runs

```
(Decimal('284'), Decimal('33'), Decimal('3'))
```

India_2nd_Innings

```
In [23]: database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_
cursor=database.cursor()
sql="insert into india_2nd_inning(player,Runs,Balls,4s,6s,S_R)values(%s,%s,%s,%s,%s,%s)"
player1=[('Shubman Gill',4,3,1,0,133.33),
          ('Cheteswar Pujara',66,168,8,0,39.29),
          ('Hanuma Vihari',11,44,1,0,25.00),
          ('Virat Kohli',20,40,4,0,50.00),
          ('Rishabh Pant',57,86,8,0,66.28),
          ('Shreyas Iyer',19,26,3,0,73.08),
          ('Ravindra Jadeja',23,58,1,0,39.66),
          ('Shardul Thakur',4,26,0,0,15.38),
          ('Mohammed Shami',13,14,2,0,92.86),
          ('Jasprit Bumrah',7,20,0,1,35.00),
          ('Mohammed Siraj',2,9,0,0,22.22),
          ('Extras',19,0,0,0,00.00)
        ]
cursor.executemany(sql,player1)
database.commit()
```

```
In [24]: print("India 2nd_inning")
database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_australia")
cursor=database.cursor()
cursor.execute("select * from india_2nd_inning")
cursor.fetchall()
```

India 2nd_inning

```
[('Shubman Gill', 4, 3, 1, 0, 133.33),
 ('Cheteswar Pujara', 66, 168, 8, 0, 39.29),
 ('Hanuma Vihari', 11, 44, 1, 0, 25.0),
 ('Virat Kohli', 20, 40, 4, 0, 50.0),
 ('Rishabh Pant', 57, 86, 8, 0, 66.28),
 ('Shreyas Iyer', 19, 26, 3, 0, 73.08),
 ('Ravindra Jadeja', 23, 58, 1, 0, 39.66),
 ('Shardul Thakur', 4, 26, 0, 0, 15.38),
 ('Mohammed Shami', 13, 14, 2, 0, 92.86),
 ('Jasprit Bumrah', 7, 20, 0, 1, 35.0),
 ('Mohammed Siraj', 2, 9, 0, 0, 22.22),
 ('Extras', 19, 0, 0, 0, 0.0)]
```

```
In [25]: print("India 2nd_inning runs")
database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_australia")
cursor=database.cursor()
cursor.execute("select SUM(Runs),SUM(4s),SUM(6s) from india_2nd_inning")
cursor.fetchone()
```

India 2nd_inning runs

```
(Decimal('245'), Decimal('28'), Decimal('1'))
```

England_2nd_Innings

```
In [26]: database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_australia")
cursor=database.cursor()
sql="insert into england_2nd_inning(player,Runs,Balls,4s,6s,S_R)values(%s,%s,%s,%s,%s,%s)"
player1=[('Alex Lees',56,65,8,0,86.15),
          ('Zak Crawley',46,76,7,0,60.53),
          ('Ollie Pope',0,3,0,0,0.00),
          ('Joe Root',142,173,19,1,82.08),
          ('Jonny Bairstow',114,145,15,1,78.62),
          ('Extras',20,0,0,0,00.00)
        ]
cursor.executemany(sql,player1)
database.commit()
```

```
In [27]: print("England 2nd_inning Scorecard")
database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_australia")
cursor=database.cursor()
cursor.execute("select * from england_2nd_inning")
cursor.fetchall()
```

England 2nd_inning Scorecard

```
[('Alex Lees', 56, 65, 8, 0, 86.15),
 ('Zak Crawley', 46, 76, 7, 0, 60.53),
 ('Ollie Pope', 0, 3, 0, 0, 0.0),
 ('Joe Root', 142, 173, 19, 1, 82.08),
 ('Jonny Bairstow', 114, 145, 15, 1, 78.62),
 ('Extras', 20, 0, 0, 0, 0.0)]
```

```
In [28]: print("England 2nd_inning runs")
database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_
cursor=database.cursor()
cursor.execute("select SUM(Runs),SUM(4s),SUM(6s) from england_2nd_inning")
cursor.fetchone()
```

England 2nd_inning runs

(Decimal('378'), Decimal('49'), Decimal('2'))

Update with where

```
In [29]: database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_
cursor=database.cursor()
sql="update india_1st_inning set Runs=40 where player='Extras'"
cursor.execute(sql)
database.commit()
```

select with where

```
In [30]: database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_
cursor=database.cursor()
cursor.execute("select * from india_1st_inning where player='Extras'")
cursor.fetchone()
```

('Extras', 40, 0, 0, 0, 0.0)

Select command with limit

```
In [31]: database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_australia")
cursor=database.cursor()
sql="select * from india_1st_inning limit 5"
cursor.execute(sql)
for i in cursor:
    print(i)
```

```
('Shubman Gill', 17, 24, 4, 0, 70.83)
('Cheteswar Pujara', 13, 46, 2, 0, 28.26)
('Hanuma Vihari', 20, 53, 1, 0, 37.74)
('Virat Kohli', 11, 19, 2, 0, 57.89)
('Rishabh Pant', 146, 111, 19, 4, 131.53)
```

Select command with limit + offset

```
In [32]: database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_australia")
cursor=database.cursor()
sql="select * from india_1st_inning limit 5 offset 1"
cursor.execute(sql)
for i in cursor:
    print(i)
```

```
('Cheteswar Pujara', 13, 46, 2, 0, 28.26)
('Hanuma Vihari', 20, 53, 1, 0, 37.74)
('Virat Kohli', 11, 19, 2, 0, 57.89)
('Rishabh Pant', 146, 111, 19, 4, 131.53)
('Shreyas Iyer', 15, 11, 3, 0, 136.36)
```

Delete command

```
In [ ]: database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_australia")
        cursor=database.cursor()
        sql="delete from india_1st_inning where player='Extras'"
        cursor.execute(sql)
        database.commit()
```

```
In [ ]: database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_australia")
        cursor=database.cursor()
        sql="delete from india_1st_inning where Runs=31"
        cursor.execute(sql)
        database.commit()
```

Drop command

```
In [ ]: #If we dropping the table that means all the records are deleted along with the schema
        database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_australia")
        cursor=database.cursor()
        sql=" drop table india_1st_inning "
        cursor.execute(sql)
        database.commit()
```



```
In [3]: #Dropping database  
database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022")  
cursor=database.cursor()  
sql=" drop database india_vs_england "  
cursor.execute(sql)  
database.commit()
```

Match Summary

Order by command

```

In [33]: print("India 1st_inning runs")
database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_
cursor=database.cursor()
cursor.execute("select SUM(Runs) from india_1st_inning")
print(cursor.fetchmany())

sql="select * from india_1st_inning order by Runs desc limit 2"
cursor.execute(sql)
for i in cursor:
    print(i)
print("=====")

#=====

print("")
print("England 1st_inning runs")
database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_
cursor=database.cursor()
cursor.execute("select SUM(Runs) from england_1st_inning")
print(cursor.fetchone())

sql="select * from england_1st_inning order by Runs desc limit 2"
cursor.execute(sql)
for i in cursor:
    print(i)
print("=====")

```

```
#=====

print("")
print("India 2nd_inning runs")
database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_")
cursor=database.cursor()
cursor.execute("select SUM(Runs)from india_2nd_inning")
print(cursor.fetchmany())

sql="select * from india_2nd_inning order by Runs desc limit 2"
cursor.execute(sql)
for i in cursor:
    print(i)
print("=====")

#=====

print("")
print("England 2nd_inning runs")
database=mysql.connector.connect(host="localhost",username="root",password="MySQL$2022",database="india_vs_")
cursor=database.cursor()
cursor.execute("select SUM(Runs) from england_2nd_inning")
print(cursor.fetchone())

sql="select * from england_2nd_inning order by Runs desc limit 2"
cursor.execute(sql)
for i in cursor:
    print(i)
```

```

India 1st_inning runs
[(Decimal('416'),)]
('Rishabh Pant', 146, 111, 19, 4, 131.53)
('Ravindra Jadeja', 104, 194, 13, 0, 53.61)
=====

England 1st_inning runs
(Decimal('284'),)
('Jonny Bairstow', 106, 140, 14, 2, 75.71)
('Sam Billings', 36, 57, 4, 0, 63.16)
=====

India 2nd_inning runs
[(Decimal('245'),)]
('Cheteswar Pujara', 66, 168, 8, 0, 39.29)
('Rishabh Pant', 57, 86, 8, 0, 66.28)
=====

England 2nd_inning runs
(Decimal('378'),)
('Joe Root', 142, 173, 19, 1, 82.08)
('Jonny Bairstow', 114, 145, 15, 1, 78.62)

```

```

In [34]: print("Player of the Series Joe Root (ENG)\n")
         print("Player of the Match Jonny Bairstow (ENG) \n106 & 114*")

```

Player of the Series Joe Root (ENG)

Player of the Match Jonny Bairstow (ENG)
106 & 114*

```

In [ ]:

```

