

In [1]: `!pip install mysql`

```
Collecting mysql
  Downloading mysql-0.0.3-py3-none-any.whl (1.2 kB)
Collecting mysqlclient
  Downloading mysqlclient-2.1.0-cp39-cp39-win_amd64.whl (180 kB)
Installing collected packages: mysqlclient, mysql
Successfully installed mysql-0.0.3 mysqlclient-2.1.0
```

In [4]: `!pip install mysql -- upgrade`

```
Requirement already satisfied: mysql in c:\users\narayana murthy g\anaconda
3\lib\site-packages (0.0.3)
Note: you may need to restart the kernel to use updated packages.

ERROR: Could not find a version that satisfies the requirement upgrade (fro
m versions: none)
ERROR: No matching distribution found for upgrade
```

In [5]: `!pip install pymysql`

```
Collecting pymysql
  Downloading PyMySQL-1.0.2-py3-none-any.whl (43 kB)
Installing collected packages: pymysql
Successfully installed pymysql-1.0.2
Note: you may need to restart the kernel to use updated packages.
```

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

```
Requirement already satisfied: mysql-connector-python in c:\users\narayana
murthy g\anaconda3\lib\site-packages (8.0.29)
Requirement already satisfied: protobuf>=3.0.0 in c:\users\narayana murthy
g\anaconda3\lib\site-packages (from mysql-connector-python) (3.20.1)
```

In []: `import mysql.connector
try :
 connection = mysql.connector.connect(host='localhost',user='root',passwd=
cursor=connection.cursor()
 cursor.execute("SHOW TABLES")
except:
 print("NOT CONNECTED")`

In [87]: `for i in cursor:
 print(i)`

```
('area',)
('buildings',)
('flats',)
('localities',)
('peoples',)
('region',)
```

```
In [69]: ▶ select_query1="""SELECT * FROM area"""
```

```
In [70]: ▶ rows=cursor.execute(select_query)
```

```
In [71]: ▶ area = cursor.fetchall()

for row in area:
    print(row)

(560022, 10003, 'YESHWANTPUR')
(560023, 10001, 'AGRAHARA')
(560043, 10003, 'BANASWADI')
(560044, 10003, 'HENNUR')
(560067, 10004, 'MADIWALA')
(560068, 10001, 'AKSHAYANAGAR')
(560079, 10002, 'KHBCOLONY')
(560103, 10001, 'BELLANDUR')
(562106, 10004, 'ANEKAL')
(574230, 10002, 'SUNKADAKATTE')
```

```
In [76]: ▶ select_query2="""SELECT * FROM buildings"""
rows=cursor.execute(select_query2)
buildings = cursor.fetchall()
for row in buildings:
    print(row)
```

```
(111, 1001, 'Burj')
(111, 1002, 'Shangai ')
(112, 1003, 'Zifeng')
(112, 1004, 'Princess')
(113, 1005, 'Al hamra')
(113, 1006, 'Shun Hing')
(114, 1007, 'Almas')
(114, 1008, 'Emirates')
(115, 1009, 'Ahmed')
(115, 1010, 'Mercury')
(116, 1011, 'The torch')
(116, 1012, 'Rose ')
(117, 1013, 'The index')
(117, 1014, 'Al yaqoob')
(118, 1015, 'Landmark')
(118, 1016, 'Q1 Tower')
(119, 1017, 'NY Tower')
(119, 1018, 'Maoye ')
(120, 1019, 'Sky tower')
(120, 1020, 'Burj rafal')
(121, 1021, 'Cayan')
(121, 1022, 'One57')
(122, 1023, 'The shard')
(122, 1024, 'Baiyoke')
(123, 1025, 'Eithad')
(123, 1026, 'Diwang')
(124, 1027, 'Wells farg')
(124, 1028, 'Doosan')
(125, 1029, 'Heung')
(125, 1030, 'Wuxi moi')
(126, 1031, 'China Zun')
(126, 1032, 'Taipei 100')
(127, 1033, 'greenland')
(127, 1034, 'lakhta')
(128, 1035, 'changsha')
(128, 1036, 'petronas')
(129, 1037, 'Willis')
(129, 1038, '111 west')
(130, 1039, 'LIC')
(130, 1040, 'Usha kiran')
(131, 1041, 'Godrej S')
(131, 1042, 'Imperial')
(132, 1043, 'The 42')
(132, 1044, 'The park')
(133, 1045, 'palias ')
(133, 1046, 'Reddy TS')
(134, 1047, 'Ahuja')
(134, 1048, 'crescent')
(135, 1049, 'worldone')
```

```
(135, 1050, 'worldtwo')
(136, 1051, 'omkar')
(136, 1052, 'reliance')
(137, 1053, 'Calcium')
(137, 1054, 'Rebound')
(138, 1055, 'Dragflick')
(138, 1056, 'shooter')
(139, 1057, 'feature')
(139, 1058, 'flavour')
(140, 1059, 'Telangana')
(140, 1060, 'Andhra TS')
```

```
In [79]: ▶ select_query3="""SELECT * FROM flats"""
rows=cursor.execute(select_query3)
flats = cursor.fetchall()
for row in flats:
    print(row)
```

```
(1, 1001, 'A')
(1, 1014, 'AA')
(2, 1014, 'AB')
(1, 1015, 'AC')
(2, 1015, 'AD')
(1, 1016, 'AE')
(2, 1016, 'AF')
(1, 1017, 'AG')
(2, 1017, 'AH')
(1, 1018, 'AI')
(2, 1018, 'AJ')
(1, 1019, 'AK')
(2, 1019, 'AL')
(1, 1020, 'AM')
(2, 1020, 'AN')
(1, 1021, 'AO')
(2, 1021, 'AP')
(1, 1022, 'AQ')
(2, 1022, 'AR')
(1, 1023, 'AS')
```

```
In [74]: ▶ select_query4="""SELECT * FROM localities"""
rows=cursor.execute(select_query4)
localities = cursor.fetchall()
for row in localities:
    print(row)
```

```
(111, 'KRUMBIGALROAD', 560023)
(112, 'ATTIMABBLEROAD', 560023)
(113, 'SURANJANDASROAD', 560023)
(114, 'NRUPATUNGAROAD', 560068)
(115, 'ALURVENKATARAOROAD', 560068)
(116, 'LAVELLEROAD', 560068)
(117, 'NITTOARSRINIVASAROAD', 560103)
(118, 'MANJAPPAROAD', 560103)
(119, 'ALIASKERROAD', 560103)
(120, 'MONOTYPEROAD', 560079)
(121, 'MISSIONROAD', 560079)
(122, 'SANKEYROAD', 560079)
(123, 'CUNNINGHAMROAD', 574230)
(124, 'CUBBONROAD', 574230)
(125, 'STMARKSROAD', 574230)
(126, 'FMCARIAPPAROAD', 560043)
(127, 'DVGROAD', 560043)
(128, 'MURGOSAROAD', 560043)
(129, 'SAMPIGEROAD', 560044)
(130, 'RACECOURSEROAD', 560044)
(131, 'MEANEEAVENUE', 560044)
(132, 'MAHATMAGROAD', 560022)
(133, 'SJPOPROAD', 560022)
(134, 'SURANJANDASROAD', 560022)
(135, 'COMMERICALSTREET', 560067)
(136, 'SAMPIGEROAD', 560067)
(137, 'RACECARCEROAD', 560067)
(138, 'KASTURBAROAD', 562106)
(139, 'TILAKROAD', 562106)
(140, 'KERVEROAD', 562106)
```

```
In [81]: ▶ select_query5="""SELECT * FROM peoples"""
rows=cursor.execute(select_query5)
people = cursor.fetchall()
for row in people:
    print(row)
```

```
('P01', 'Q', 'RAM', 'MASHRAFE')
('P02', 'W', 'LAXMAN', 'MORTAZA')
('P03', 'E', 'VIRAT', 'MUSHFIQU')
('P04', 'R', 'KOHLI', 'RAHMAN')
('P05', 'T', 'ROHIT', 'SARKAR')
('P06', 'Y', 'SHARMA', 'SOUMYA')
('P07', 'U', 'RAHUL', 'LITTON')
('P08', 'I', 'BHAJJI', 'DAS')
('P09', 'O', 'TENDULKAR', 'MEHANDI')
('P10', 'P', 'RAMESH', 'HASAN')
('P100', 'CX', 'VVS', 'KAVITHA')
('P101', 'CY', 'LAXMAN', 'BHABHI')
('P102', 'CZ', 'DRAVID', 'MALLU')
('P103', 'DA', 'PARAS', 'HABIBI')
('P104', 'DB', 'MAMABHR', 'MIA')
('P105', 'DD', 'SHOAIB', 'SHAKILA')
('P106', 'DC', 'IMRAN', 'SHAKEERA')
('P107', 'DE', 'DECOCK', 'JUSTIN')
('P108', 'DF', 'TSOTSOBE', 'BIEBER')
('P109', 'EG', 'MAKHAN', 'TUSKANI')
```

```
In [63]: ▶ select_query6="""SELECT * FROM region"""
rows=cursor.execute(select_query6)
ro = cursor.fetchall()
```

```
In [38]: ▶ select_query6="""SELECT DNAME FROM peoples
where HNAME='KOHLI'"""
rows=cursor.execute(select_query6)
rows = cursor.fetchall()
for row in rows:
    print(row)
```

```
('RAHMAN',)
```

```
In [61]: ▶ !pip install tabulate
```

```
Collecting tabulate
  Downloading tabulate-0.8.9-py3-none-any.whl (25 kB)
Installing collected packages: tabulate
Successfully installed tabulate-0.8.9
```

```
In [62]: ▶ from tabulate import tabulate
```

```
In [64]: ► table = tabulate(r, headers = ['RegionId', 'Rname'], tablefmt = 'fancy_grid')
print(table)
```

RegionId	Rname
10001	B_EAST
10002	B_WEST
10003	B_NORTH
10004	B_SOUTH

```
In [72]: ► table = tabulate(area, headers = ['PINCODE', 'RID', 'ANAME'], tablefmt = 'fancy_grid')
print(table)
```

PINCODE	RID	ANAME
560022	10003	YESHWANTPUR
560023	10001	AGRAHARA
560043	10003	BANASWADI
560044	10003	HENNUR
560067	10004	MADIWALA
560068	10001	AKSHAYANAGAR
560079	10002	KHBCOLONY
560103	10001	BELLANDUR
562106	10004	ANEKAL
574230	10002	SUNKADAKATTE

```
In [75]: ▶ table = tabulate(localities, headers = ['LID', 'STREETNAME', 'PINCODE'], tablefmt='psql')
print(table)
```

LID	STREETNAME	PINCODE
111	KRUMBIGALROAD	560023
112	ATTIMABBLEROAD	560023
113	SURANJANDASROAD	560023
114	NRUPATUNGAROAD	560068
115	ALURVENKATARAOROAD	560068
116	LAVELLEROAD	560068
117	NITTOARSRINIVASAROAD	560103
118	MANJAPPAROAD	560103
119	ALIASKERROAD	560103
120	MONOTYPEROAD	560079
121	MISSIONROAD	560079
122	SANKEYROAD	560079
123	CUNNINGHAMROAD	574230
124	CUBBONROAD	574230
125	STMARKSROAD	574230
126	FMCARIAPPAROAD	560043
127	DVGROAD	560043
128	MURGOSAROAD	560043
129	SAMPIGEROAD	560044
130	RACECOURSEROAD	560044
131	MEANEEAVENUE	560044
132	MAHATMAGROAD	560022
133	SJPOPROAD	560022
134	SURANJANDASROAD	560022
135	COMMERICALSTREET	560067

136	SAMPIGEROAD	560067
137	RACECARCEROAD	560067
138	KASTURBAROAD	562106
139	TILAKROAD	562106
140	KERVEROAD	562106

```
In [77]: ▶ table = tabulate(buildings, headers = ['LID', 'BNO', 'BNAME'], tablefmt = 'fancy_grid')
print(table)
```

LID	BNO	BNAME
111	1001	Burj
111	1002	Shangai
112	1003	Zifeng
112	1004	Princess
113	1005	Al hamra
113	1006	Shun Hing
114	1007	Almas
114	1008	Emirates
115	1009	Al Jaddaf

```
In [80]: ▶ table = tabulate(flats, headers = ['FLAT_NO', 'BNO', 'WING'], tablefmt = 'fancy',
print(table)
```

FLAT_NO	BNO	WING
1	1001	A
1	1014	AA
2	1014	AB
1	1015	AC
2	1015	AD
1	1016	AE
2	1016	AF
1	1017	AG
2	1017	AH

```
In [82]: ▶ table = tabulate(people, headers = ['PID', 'WING', 'HNAME', 'DNAME'], tablefmt = 'fancy',
print(table)
```

PID	WING	HNAME	DNAME
P01	Q	RAM	MASHRAFE
P02	W	LAXMAN	MORTAZA
P03	E	VIRAT	MUSHFIQU
P04	R	KOHLI	RAHMAN
P05	T	ROHIT	SARKAR
P06	Y	SHARMA	SOUMYA
P07	U	RAHUL	LITTON
P08	I	BHAJJI	DAS
P09	S	TENDULKAR	MEHARIST

```
In [84]: ▶ select_query7="""SELECT * FROM REGION R JOIN AREA A ON R.RID=A.RID
        """
        rows=cursor.execute(select_query7)
        rows = cursor.fetchall()
        for row in rows:
            print(row)
```

```
(10001, 'B_EAST', 560023, 10001, 'AGRAHARA')
(10001, 'B_EAST', 560068, 10001, 'AKSHAYANAGAR')
(10001, 'B_EAST', 560103, 10001, 'BELLANDUR')
(10002, 'B_WEST', 560079, 10002, 'KHBCOLONY')
(10002, 'B_WEST', 574230, 10002, 'SUNKADAKATTE')
(10003, 'B_NORTH', 560022, 10003, 'YESHWANTPUR')
(10003, 'B_NORTH', 560043, 10003, 'BANASWADI')
(10003, 'B_NORTH', 560044, 10003, 'HENNUR')
(10004, 'B_SOUTH', 560067, 10004, 'MADIWALA')
(10004, 'B_SOUTH', 562106, 10004, 'ANEKAL')
```

```
In [85]: ▶ pwd
```

```
Out[85]: 'C:\\Users\\NARAYANA MURTHY G\\FUTURENSE'
```

```
In [ ]: ▶
```