

## Assignment - 8

Title :- Database Connectivity

Problem statement :-

Write a program to implement MySQL/oracle database connectivity with any fronted language to implement database navigations operations (add, delete, edit, etc)

Objective :-

- To insert a record in MySQL database using Java / PHP / python
- To update a record in MySQL database using Java / PHP / python
- To delete a record in MySQL database using Java / PHP / python

S/W and H/W requirement :-

MySQL / oracle, windows - 10, 64 bit  
8 GB RAM, 512 GB SSD.

Theory :-

The following are the steps to connect python application to MySQL database

1. Import MySQL connector module
2. Create the connection object
3. Create the cursor object
4. Execute the query.

Creating connection :-

connect ( ) Method of MySQL Connector module is used.



Pass the databox details like Hostname, username, password and the databox to be used the method returns a Connection object.

### Creating cursor object :-

The cursor object can be defined as an abstraction specified in python db-api 2.0.

It facilitates us to have multiple separate working environments through the same connection to the database. we can create the cursor object by calling the cursor() function of connection object.

The cursor object is an important aspect of executing queries to the databox.

### Executing SQL commands of CRUD operations :-

To perform SQL commands on a databox from python application simply pass the query to execute() function of cursor object.

\* (Note :- Close the databox connection to disconnect from databox by calling close() function of connection object.

### Conclusion :-

Successfully implemented database connectivity using python and performed CRUD operations on the MySQL database.

```
mysql> use assignment08;
```

Database changed

```
mysql> create table Student(
```

```
-> Name Varchar(20),
```

```
-> Roll_No int,
```

```
-> Primary key(Roll_No)
```

```
-> );
```

Query OK, 0 rows affected (0.07 sec)

```
mysql> desc Student;
```

Field	Type	Null	Key	Default	Extra
Name	varchar(20)	YES		NULL	
Roll_No	int	NO	PRI	NULL	

2 rows in set (0.03 sec)

```
mysql> insert into Student values
```

```
-> ('Rupesh', 31124),
```

```
-> ('Omkar', 31126),
```

```
-> ('Gayatri', 31127);
```

Query OK, 3 rows affected (0.02 sec)

Records: 3 Duplicates: 0 Warnings: 0

```
mysql> select * from Student;
```

Name	Roll_No
Rupesh	31124
Omkar	31126
Gayatri	31127

3 rows in set (0.01 sec)




21°C Clear



ENG 11:27 PM



 Python

```
PS C:\Users\HP\Rupesh\PICT\TE SEM 1\DBS Lab\Assignment 08> python 31124_Rupesh_Dharme_DB
```

```
What to perform?
```

1. Create (Insert)
2. Read (Select)
3. Update (Update)
4. Delete (Delete)
5. Exit

```
2
```

```
Roll_No Name
```

```
Rupesh 31124
```

```
Omkar 31126
```

```
Gayatri 31127
```

```
read!
```

```
What to perform?
```

1. Create (Insert)
2. Read (Select)
3. Update (Update)
4. Delete (Delete)
5. Exit

```
1
```

```
Enter Roll no: 31129
```

```
Enter name: Dheeraj
```

```
inserted!
```


```
What to perform?
```

1. Create (Insert)
2. Read (Select)
3. Update (Update)
4. Delete (Delete)
5. Exit

```
2
```

```
Roll_No Name
```

```
Rupesh 31124
```

 Python

What to perform?

1. Create (Insert)
2. Read (Select)
3. Update (Update)
4. Delete (Delete)
5. Exit

2

Roll\_No Name

Rupesh 31124

Omkar 31126

Gayatri 31127

Dheeraj 31129

read!

What to perform?

1. Create (Insert)
2. Read (Select)
3. Update (Update)
4. Delete (Delete)
5. Exit

3

Enter Roll no: 31129

Enter name: Nikhil

updated!


What to perform?



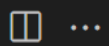
1. Create (Insert)
2. Read (Select)
3. Update (Update)
4. Delete (Delete)
5. Exit

2

Roll\_No Name

Rupesh 31124

 Python

What to perform?

1. Create (Insert)
2. Read (Select)
3. Update (Update)
4. Delete (Delete)
5. Exit

2

Roll\_No Name

Rupesh 31124

Omkar 31126

Gayatri 31127

Nikhil 31129

read!

What to perform?

1. Create (Insert)
2. Read (Select)
3. Update (Update)
4. Delete (Delete)
5. Exit

4

Enter Roll no: 31129

deleted!

What to perform?


1. Create (Insert)
2. Read (Select)
3. Update (Update)
4. Delete (Delete)
5. Exit

2

Roll\_No Name

Rupesh 31124

Omkar 31126

 Python

```
1. Create (Insert)
2. Read (Select)
3. Update (Update)
4. Delete (Delete)
5. Exit
4
Enter Roll no: 31129
deleted!
What to perform?
1. Create (Insert)
2. Read (Select)
3. Update (Update)
4. Delete (Delete)
5. Exit
2
Roll_No Name
Rupesh 31124
Omkar 31126
Gayatri 31127
read!
What to perform?
1. Create (Insert)
2. Read (Select)
3. Update (Update)
4. Delete (Delete)
5. Exit
5
PS C:\Users\HP\Rupesh\PICT\TE SEM 1\DBS Lab\Assignment 08> |
```