

## Feature:

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Server runs a MYSQL database and client executes sql queries on the server and receives query result.

## Reference:

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<http://dev.mysql.com/doc/refman/5.7/en/c-api-function-overview.html>

<https://www.youtube.com/watch?v=jACHG6tZakw>

<https://www.youtube.com/watch?v=vgs1eQJ1avs>

## Screenshots:

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1. Client accesses mysqlserver on the server and performs desc, insert, delete, select operations.

```
michail@m:~/cn/CS16MTECH11009_Submission_Assignment2/Part_Aa_MySQL$ gcc $(mysql_config --cflags) sqlserver.c $(mysql_config --libs) -o mysqlserver
michail@m:~/cn/CS16MTECH11009_Submission_Assignment2/Part_Aa_MySQL$ ./mysqlserver 3334 root 123 127.0.0.1 client_server_application 3306

Handling client 127.0.0.1 42779
```

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```
michail@m:~/cn/CS16MTECH11009_Submission_Assignment2/Part_Aa_MySQL$ gcc $(mysql_config --cflags) sqlclient.c $(mysql_config --libs) -o mysqlclient
michail@m:~/cn/CS16MTECH11009_Submission_Assignment2/Part_Aa_MySQL$ ./mysqlclient 127.0.0.1 3334
MySQL: show tables;
authors
mytable

MySQL: desc authors;
+----+-----+-----+-----+
id   |int(11)|YES   |      |(null) |
name |varchar(20)|YES  |      |(null) |
email|varchar(20)|YES  |      |(null) |
+----+-----+-----+-----+

MySQL: select * from authors;
Empty set
MySQL: insert into authors value(1,"iith","acn@iith.ac.in");

Result Successful.

MySQL: select * from authors;
+----+-----+-----+
1   |iith |acn@iith.ac.in|
+----+-----+-----+

MySQL: delete from authors;

Result Successful.

MySQL: select * from authaaaaaa;

Error: Table 'client_server_application.authaaaaaa' doesn't exist[1146]

MySQL: exit
michail@m:~/cn/CS16MTECH11009_Submission_Assignment2/Part_Aa_MySQL$ █
```

2. Two clients access the mysqlserver on the server and able to see eachothers changes.

```
michail@mr:~$ gcc $(mysql_config --cflags) sqlserver.c $(mysql_config --libs) -o mysqlserver
michail@mr:~/CS16MTECH11009_Submission_Assignment2/Part_Aa_MySQL$ ./mysqlserver 3334 root 123 127.0.0.1 client_server_application 3306
Handling client 127.0.0.1 42784
Handling client 127.0.0.1 42785
michail@mr:~/CS16MTECH11009_Submission_Assignment2/Part_Aa_MySQL$ gcc $(mysql_config --cflags) sqlclient.c $(mysql_config --libs) -o mysqlclient
michail@mr:~/CS16MTECH11009_Submission_Assignment2/Part_Aa_MySQL$ ./mysqlclient 127.0.0.1 3334
MySQL:
Error: Query was empty[1065]
MySQL: select * from authors;
1 |iith |acn&iith.ac.in
MySQL: exit
michail@mr:~/CS16MTECH11009_Submission_Assignment2/Part_Aa_MySQL$
michail@mr:~/CS16MTECH11009_Submission_Assignment2/Part_Aa_MySQL$ ./mysqlclient 127.0.0.1 3334
MySQL: select * from authors;
Empty set
MySQL: insert into authors values(1,"iith", "acn&iith.ac.in");
Result Successful.
MySQL: exit
michail@mr:~/CS16MTECH11009_Submission_Assignment2/Part_Aa_MySQL$
```