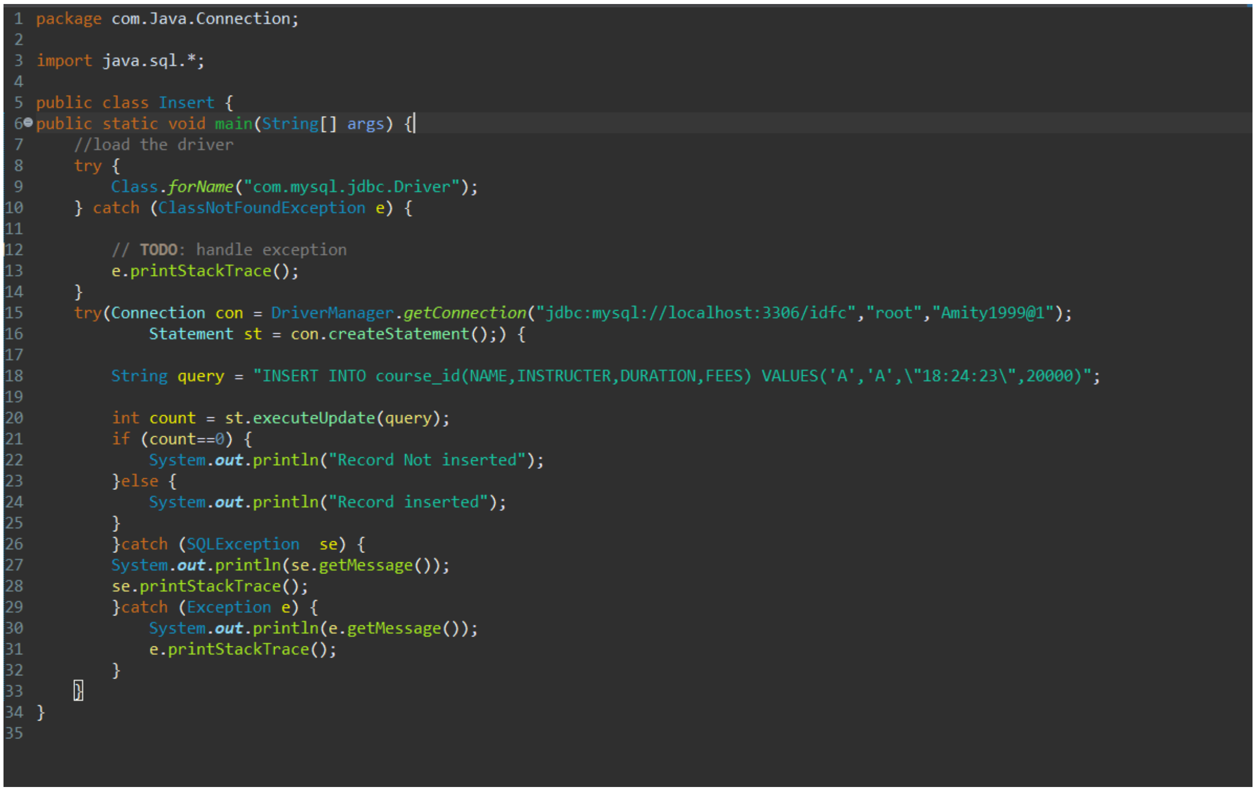
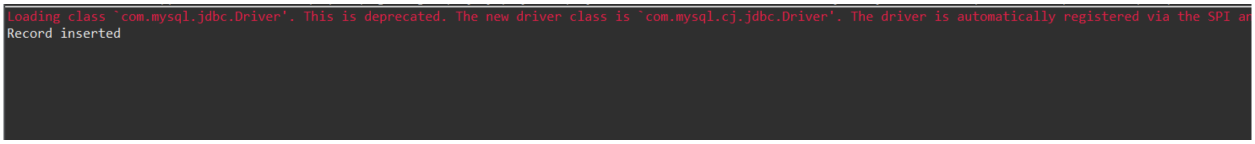
1. Create a JDBC Connectivity and perform CRUD Operation for the following Schema. COURSE ID NAME INSTRUCTOR DURATION FEES\

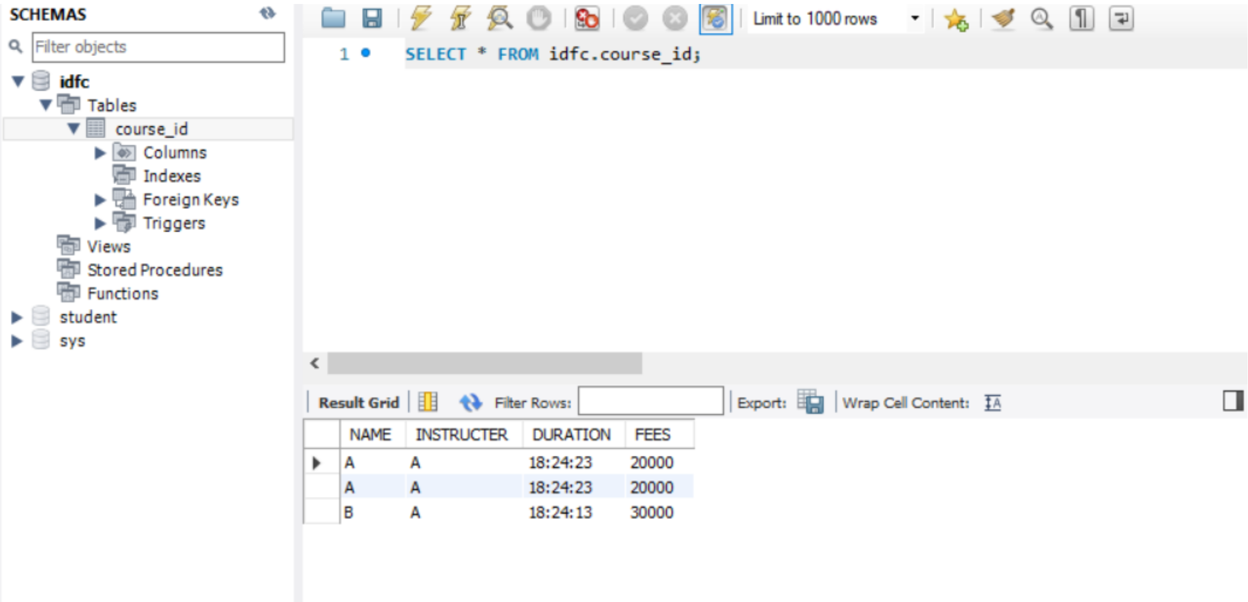
Insert



```java
package com.Java.Connection;

import java.sql.*;

public class Insert {
public static void main(String[] args) {
    //load the driver
    try {
        Class.forName("com.mysql.jdbc.Driver");
    } catch (ClassNotFoundException e) {

        // TODO: handle exception
        e.printStackTrace();
    }
    try(Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/idfc","root","Amity1999@1");
            Statement st = con.createStatement();) {

        String query = "INSERT INTO course_id(NAME,INSTRUCTER,DURATION,FEES) VALUES('A','A',\"18:24:23\",20000)";

        int count = st.executeUpdate(query);
        if (count==0) {
            System.out.println("Record Not inserted");
        }else {
            System.out.println("Record inserted");
        }
        }catch (SQLException  se) {
        System.out.println(se.getMessage());
        se.printStackTrace();
        }catch (Exception e) {
            System.out.println(e.getMessage());
            e.printStackTrace();
        }
    }
}
```



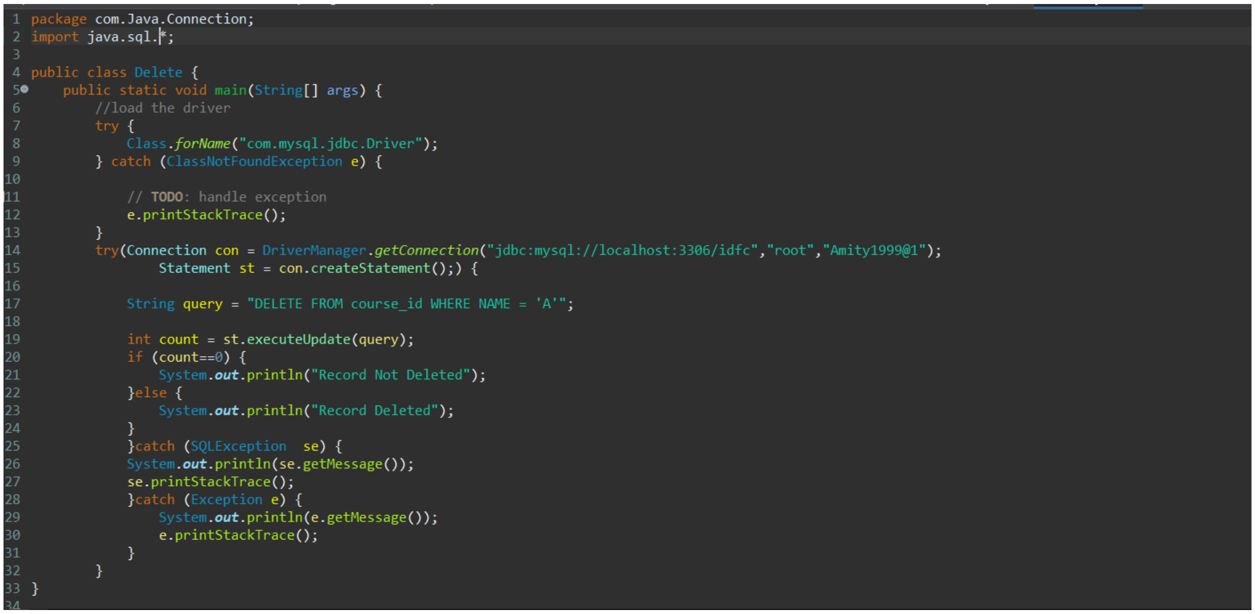
```
Loading class `com.mysql.jdbc.Driver'. This is deprecated. The new driver class is `com.mysql.cj.jdbc.Driver'. The driver is automatically registered via the SPI an
Record inserted
```



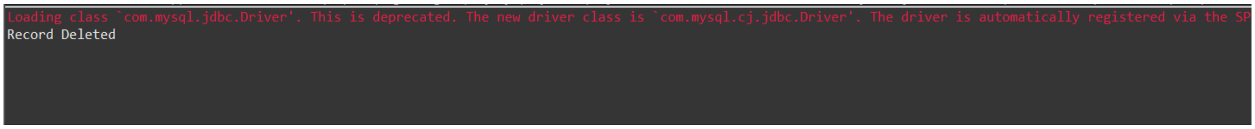
```
SELECT * FROM idfc.course_id;
```

NAME	INSTRUCTER	DURATION	FEES
A	A	18:24:23	20000
A	A	18:24:23	20000
B	A	18:24:13	30000

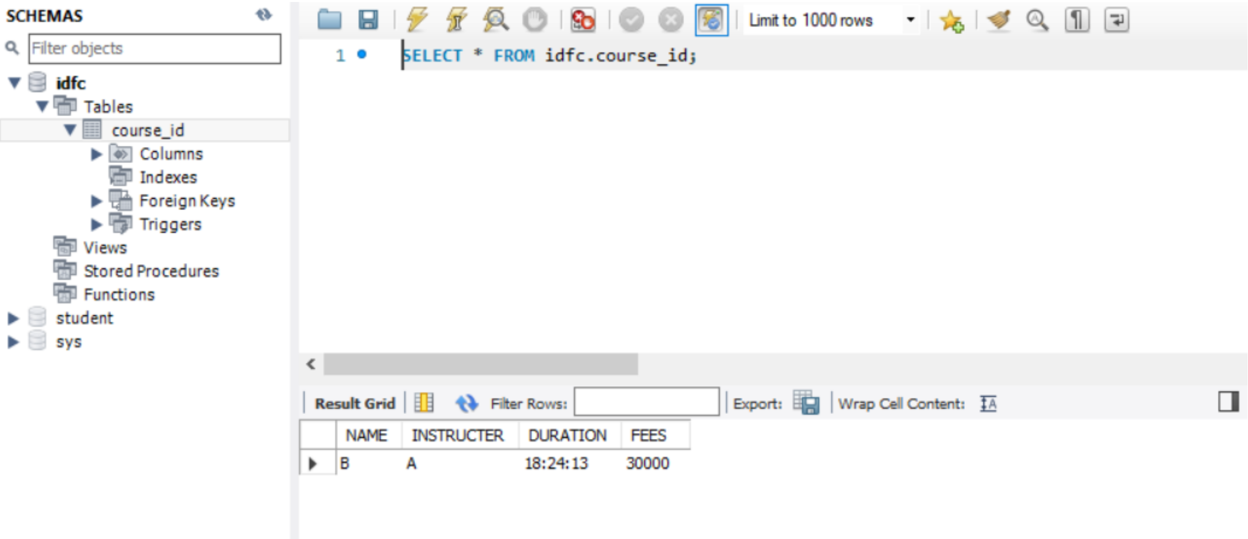
Delete



```java
package com.Java.Connection;
import java.sql.*;

public class Delete {
    public static void main(String[] args) {
        //load the driver
        try {
            Class.forName("com.mysql.jdbc.Driver");
        } catch (ClassNotFoundException e) {

            // TODO: handle exception
            e.printStackTrace();
        }
        try(Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/idfc","root","Amity1999@1");
                Statement st = con.createStatement();) {

            String query = "DELETE FROM course_id WHERE NAME = 'A'";

            int count = st.executeUpdate(query);
            if (count==0) {
                System.out.println("Record Not Deleted");
            }else {
                System.out.println("Record Deleted");
            }
            }catch (SQLException  se) {
            System.out.println(se.getMessage());
            se.printStackTrace();
            }catch (Exception e) {
                System.out.println(e.getMessage());
                e.printStackTrace();
            }
        }
}
```



```
Loading class `com.mysql.jdbc.Driver'. This is deprecated. The new driver class is `com.mysql.cj.jdbc.Driver'. The driver is automatically registered via the SP
Record Deleted
```

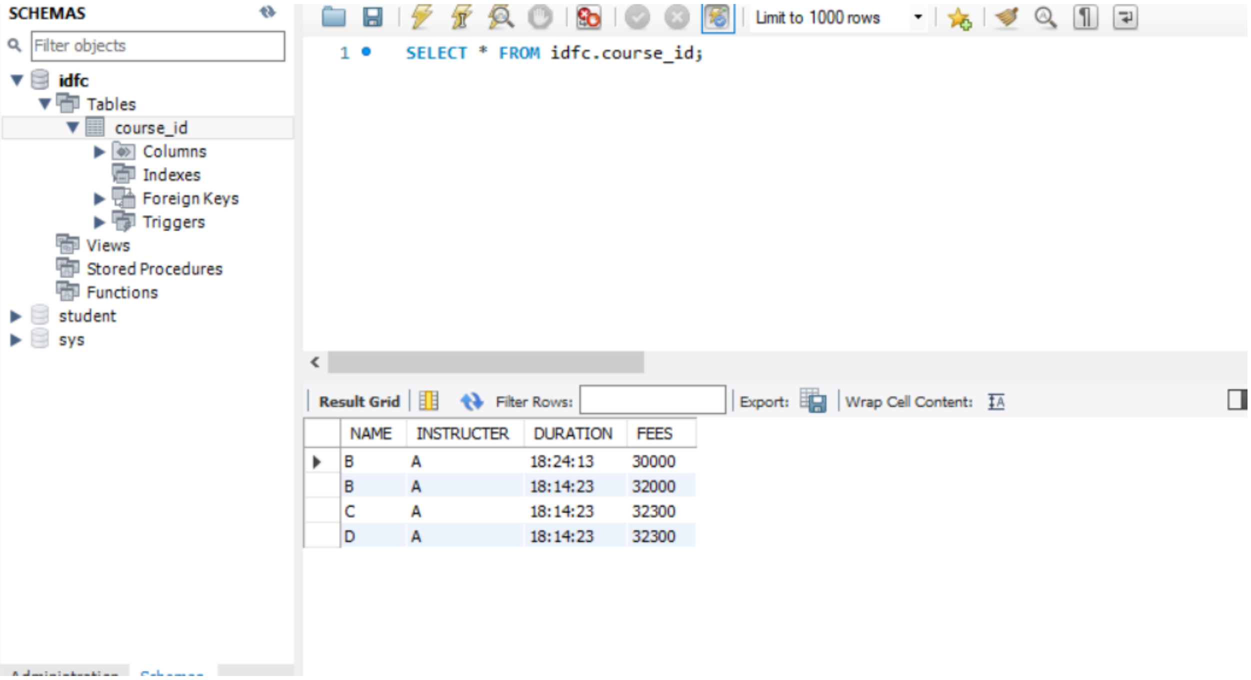


```sql
SELECT * FROM idfc.course_id;
```

NAME	INSTRUCTER	DURATION	FEES
B	A	18:24:13	30000

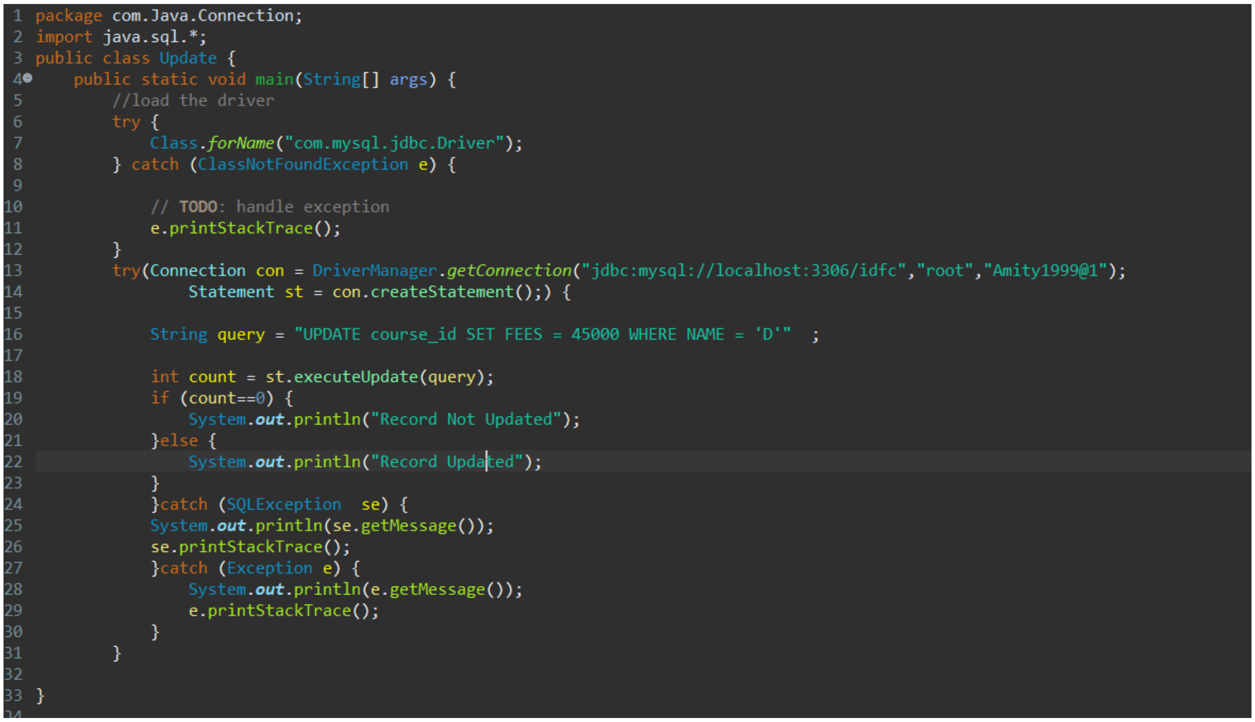
UPDATE

(Before Update database is)

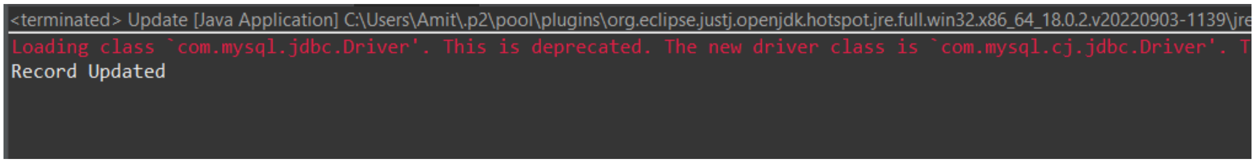


```sql
SELECT * FROM idfc.course_id;
```

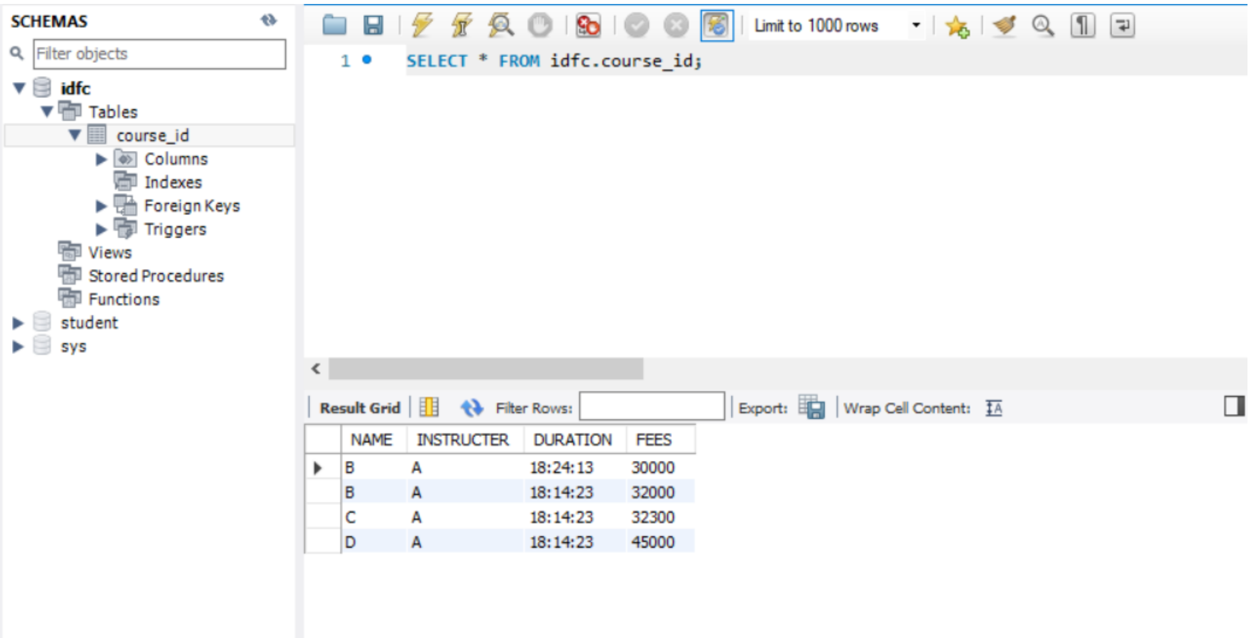
NAME	INSTRUCTER	DURATION	FEES
B	A	18:24:13	30000
B	A	18:14:23	32000
C	A	18:14:23	32300
D	A	18:14:23	32300



```java
package com.Java.Connection;
import java.sql.*;
public class Update {
    public static void main(String[] args) {
        //load the driver
        try {
            Class.forName("com.mysql.jdbc.Driver");
        } catch (ClassNotFoundException e) {

            // TODO: handle exception
            e.printStackTrace();
        }
        try(Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/idfc","root","Amity1999@1");
                Statement st = con.createStatement();) {

            String query = "UPDATE course_id SET FEES = 45000 WHERE NAME = 'D'"  ;

            int count = st.executeUpdate(query);
            if (count==0) {
                System.out.println("Record Not Updated");
            }else {
                System.out.println("Record Updated");
            }
            }catch (SQLException  se) {
            System.out.println(se.getMessage());
            se.printStackTrace();
            }catch (Exception e) {
                System.out.println(e.getMessage());
                e.printStackTrace();
            }
        }

}
```



```
<terminated> Update [Java Application] C:\Users\Amit\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_18.0.2.v20220903-1139\jre
Loading class `com.mysql.jdbc.Driver'. This is deprecated. The new driver class is `com.mysql.cj.jdbc.Driver'. T
Record Updated
```

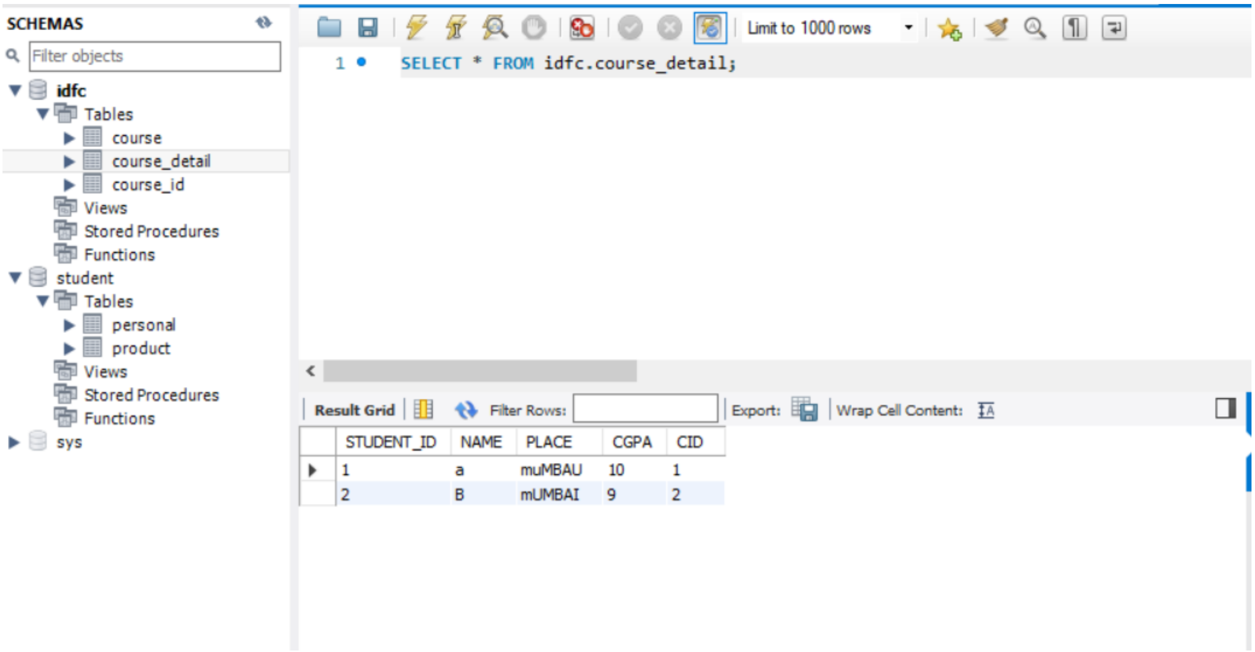


```sql
SELECT * FROM idfc.course_id;
```

NAME	INSTRUCTER	DURATION	FEES
B	A	18:24:13	30000
B	A	18:14:23	32000
C	A	18:14:23	32300
D	A	18:14:23	45000

2. Describe the COURSE DETAIL Stable.

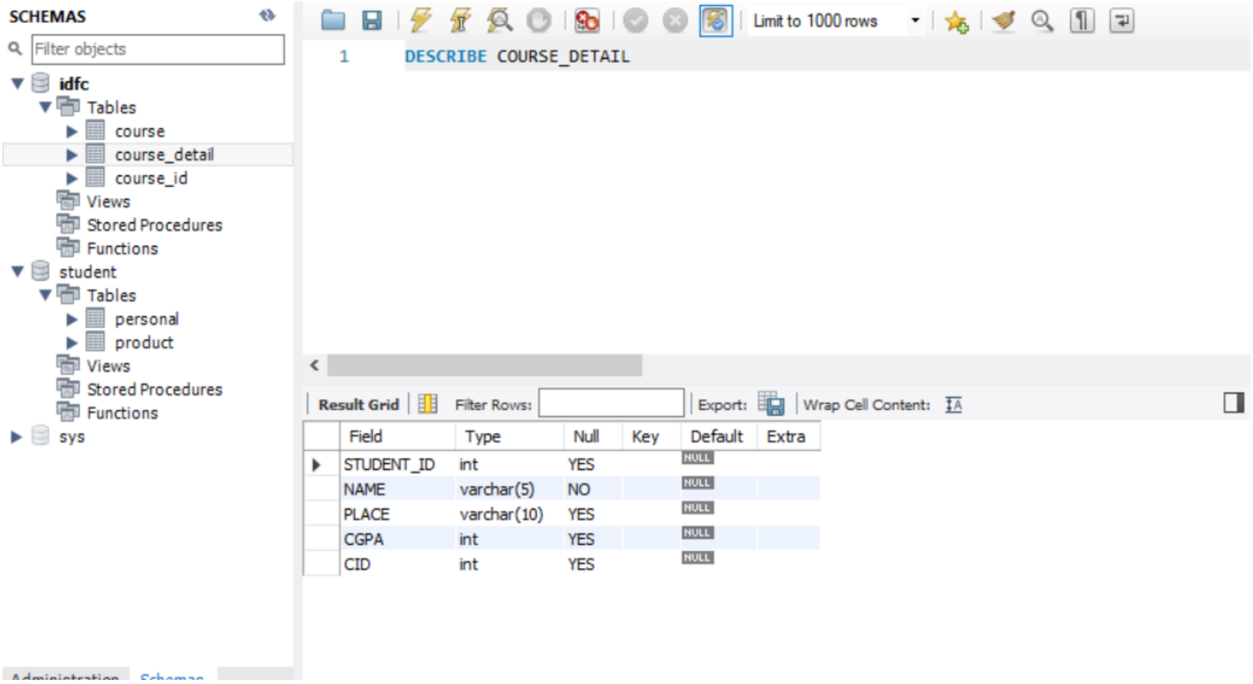
a. Student table has to be created based on the above schema (i) Name should not be null



```
SELECT * FROM idfc.course_detail;
```

STUDENT_ID	NAME	PLACE	CGPA	CID
1	a	muMBAU	10	1
2	B	mUMBAI	9	2

b. Describe the student table

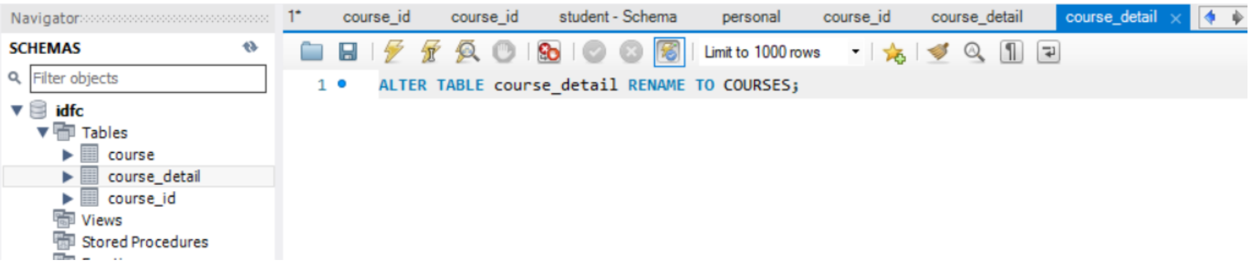


```
DESCRIBE COURSE_DETAIL
```

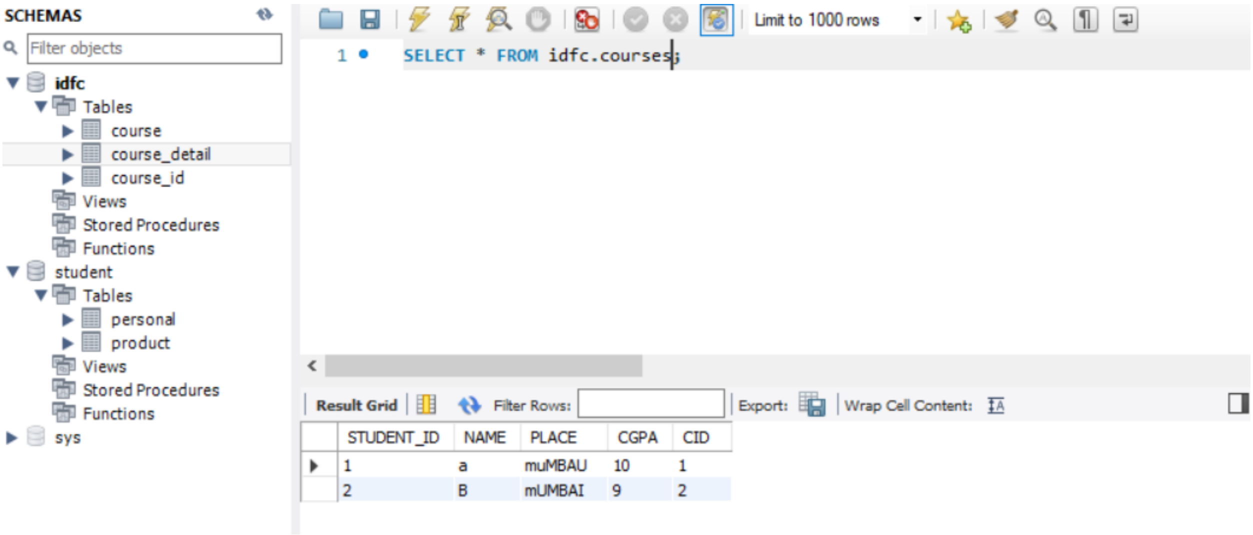
Field	Type	Null	Key	Default	Extra
STUDENT_ID	int	YES		NULL	
NAME	varchar(5)	NO		NULL	
PLACE	varchar(10)	YES		NULL	
CGPA	int	YES		NULL	
CID	int	YES		NULL	

C. Add an extra column credit in the course table (Note: a single digit number will be stored).

f. Rename the COURSE_DETAILS as COURSE.



```
ALTER TABLE course_detail RENAME TO COURSES;
```



```
SELECT * FROM idfc.courses;
```

STUDENT_ID	NAME	PLACE	CGPA	CID
1	a	muMBAU	10	1
2	B	mUMBAI	9	2