

Homework 02-14

Statement vs PreparedStatement vs CallableStatement

Statement: Used to execute normal SQL queries.

PreparedStatement is used to execute parameterized or dynamic SQL queries.

```
select * from STUDENT where ID = ?;  
// where '?' is called Parameter Index or Place Holder
```

CallableStatement is an interface in JDBC API which is used to call the stored procedures from the Java code.

Stored procedures: a set of SQL statements to be executed to perform a specific task on a database.

i.e.

```
CREATE OR REPLACE PROCEDURE P1 AS  
BEGIN  
INSERT INTO STUDENT VALUES(123, 'RAHUL', 'SHARMA', 'FIRST');  
UPDATE STUDENT SET FIRST_NAME = 'KIRAN' WHERE ID = 123;  
END;
```

```
CallableStatement cstmt = null;  
try {  
    String URL = "URL";  
    String username = "username";  
    String password = "password";  
    cstmt = con.prepareCall("{call P1}");  
    cstmt.execute();  
} catch (SQLException e)  
{  
    e.printStackTrace();  
}
```