

# MAWLANA BHASHANI SCIENCE AND TECHNOLOGY UNIVERSITY

SANTOSH, TANGAIL-1902



DEPARTMENT OF INFORMATION AND COMMUNICATION TECHNOLOGY

## Lab Report

**Lab Report No: 06**

**Lab Report on:** Using PreparedStatement in JDBC – Performance and Security

**Course Title:** Software Engineering and Project Management Lab

**Course Code:** ICT-3108

Submitted By	Submitted To
Name: Farhad Ali ID: IT-23035 3rd Year, 1st Semester Session: 2022-2023 Dept. of ICT, MBSTU	Dr. Ziaur Rahman Associate Professor  Dept of ICT, MBSTU

Date of Performance:

Date of Submission:

#### Lab report-6:

Prepared statement is used to execute SQL queries safely in JDBC. It improves performance because the query is precompiled by the database. The same query can be used many times with different values. Prepared statement is faster than statement for repeated queries. It also improves security by preventing SQL injection attack. User input is treated as data not as SQL code. Statement directly executes SQL and is less secure. Prepared statement is better for the performance and security.

#### Java code (Insert Using prepared statement):

```
import java.sql.*;  
class inserttable {  
    public static void main(String[] args)  
    {  
        try {
```

```

Connection con = DriverManager.getConnection(
    "jdbc:mysql://localhost:3306/testdb","root",
    "123@qw@123");
String sql = "Insert into Student (id,name)
              values(?,?) ";
PreparedStatement ps = con.prepareStatement(sql);
ps.setInt(1,1);
ps.setString(2,"Pahim");
ps.executeUpdate();
System.out.println("Record inserted");
con.close();
}
catch (Exception e) {
    System.out.println("Error Occured");
}
}

```