

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
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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 (Invert Using prepared statement):

```
import java.sql.*;  
class invertfixable{  
    public static void main(String args){  
        ?  
        try {
```

```
Connection con = DriverManager.get Connection(  
    "Jdbc:mysql://localhost:3306/testdb", "root",  
    "123@arib@123");  
String sql = "Insert into student (id, name)  
    values (?, ?);";  
PreparedStatement ps = con.prepareStatement(sql);  
ps.setInt(1, 1);  
ps.setString(2, "Rahim");  
ps.executeUpdate();  
System.out.println("Record inserted");  
con.close();  
}  
catch (Exception e) {  
    System.out.println("Error Occurred");  
}
```