

Lecture 7: Fetching All Records

Setup Additional Test Data:

```
INSERT INTO student VALUES (2, 'Kiran', 50);
INSERT INTO student VALUES (3, 'Harsh', 60);
INSERT INTO student VALUES (4, 'Sushil', 40);
```

Complete Code to Fetch All Records:

```
import java.sql.*;

public class FetchAllRecords {
    public static void main(String[] args) {
        String url = "jdbc:postgresql://localhost:5432/demo";
        String username = "postgres";
        String password = "0000";

        Connection conn = null;
        Statement stmt = null;
        ResultSet rs = null;

        try {
            // Establish connection
            Class.forName("org.postgresql.Driver");
            conn = DriverManager.getConnection(url, username, password);
            System.out.println("Connection established");

            // Query to fetch all records
            String query = "SELECT * FROM student";

            // Create statement and execute query
            stmt = conn.createStatement();
            rs = stmt.executeQuery(query);

            // Display headers
            System.out.println("SID\tName\t\tMarks");
            System.out.println("---\t---\t\t----");

            // Process all rows
            while (rs.next()) {
                int sid = rs.getInt(1); // or rs.getInt("sid")
                String sname = rs.getString(2); // or rs.getString("sname")
                int marks = rs.getInt(3); // or rs.getInt("marks")

                System.out.println(sid + "\t" + sname + "\t\t" + marks);
            }
        }
    }
}
```

```

    } catch (Exception e) {
        System.out.println("Error: " + e.getMessage());
        e.printStackTrace();
    } finally {
        // Close resources
        try {
            if (rs != null) rs.close();
            if (stmt != null) stmt.close();
            if (conn != null) conn.close();
            System.out.println("Connection closed");
        } catch (SQLException e) {
            System.out.println("Error closing resources: " + e.getMessage());
        }
    }
}
}

```

ResultSet Navigation Methods:

- **rs.next():** Move to next row
- **rs.previous():** Move to previous row
- **rs.first():** Move to first row
- **rs.last():** Move to last row
- **rs.absolute(n):** Move to nth row