**The result can be scrolled; its cursor can move both forward and backward relative to the current position, and it can move to an absolute position. The result set reflects changes made to the underlying data source while the result set remains open.**

importjava.sql.\*;

publicclassReadDatabaseStructureExample {

    publicstaticvoidmain(String[] args) {

        String url = "jdbc:mysql://localhost:3306/college";

        String username = "root";

        String password = "password";

        try(Connection conn = DriverManager.getConnection(url, username, password)) {

            DatabaseMetaData meta = conn.getMetaData();

            String catalog = null, schemaPattern = null, tableNamePattern = null;

            String[] types = {"TABLE"};

            ResultSetrsTables = meta.getTables(catalog, schemaPattern, tableNamePattern, types);

            while(rsTables.next()) {

                String tableName = rsTables.getString(3);

                System.out.println("\n=== TABLE: "+ tableName);

                String columnNamePattern = null;

                ResultSetrsColumns = meta.getColumns(catalog, schemaPattern, tableName, columnNamePattern);

                ResultSetrsPK = meta.getPrimaryKeys(catalog, schemaPattern, tableName);

                while(rsColumns.next()) {

                    String columnName = rsColumns.getString("COLUMN\_NAME");

                    String columnType = rsColumns.getString("TYPE\_NAME");

                    intcolumnSize = rsColumns.getInt("COLUMN\_SIZE");

                    System.out.println("\t"+ columnName + " - "+ columnType + "("+ columnSize + ")");

                }

                while(rsPK.next()) {

                    String primaryKeyColumn = rsPK.getString("COLUMN\_NAME");

                    System.out.println("\tPrimary Key Column: "+ primaryKeyColumn);

                }

            }

        } catch(SQLException ex) {

            System.out.println(ex.getMessage());

            ex.printStackTrace();

        }

    }

}

Output:

