```java
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import java.sql.PreparedStatement;

// Notkun: java -cp .;sqlite-jdbc-....jar V11 <args>
//         þar sem <args> er: [autocommit|noautocommit] [index|noindex]
// Eftir:  Búið er að mæla tíma fyrir gagnagrunnsaðgerðir og
//         skrifa niðurstöður
public class V11
{
    public static void main( String[] args )
        throws Exception
    {
        Class.forName("org.sqlite.JDBC");
        boolean USE_AUTOCOMMIT = args[0].equals("autocommit");
        boolean USE_INDEX = args[1].equals("index");
        Connection conn = null;
        try
        {
            conn = DriverManager.getConnection("jdbc:sqlite:v11.db");
            conn.setAutoCommit(USE_AUTOCOMMIT);
            Statement statement = conn.createStatement();
            statement.execute("DROP TABLE IF EXISTS R");
            statement.execute("DROP INDEX IF EXISTS RINDEX");
            statement.execute("CREATE TABLE R(key INTEGER PRIMARY KEY, value
DOUBLE)");
            if(USE_INDEX){
                statement.execute("CREATE INDEX RINDEX ON R (value)");
            }
            PreparedStatement pstmt = conn.prepareStatement("INSERT INTO R VALUES
(?, ?)");
            long start,end;
            start = System.nanoTime();

            int i;
            for( i=0 ; i!=1000000 ; i++ )
            {
                if((System.nanoTime()-start)>60000000000L){
                    break;
                }
                Double rand = Math.random();
                pstmt.setInt(1,i);
                pstmt.setDouble(2,rand);
                pstmt.executeUpdate();
            }
            if( !USE_AUTOCOMMIT ) conn.commit();
            end = System.nanoTime();
            System.out.println("Timi fyrir "+
                               i+" innsetningar: "+
                               (double)(end-start)/1e9
                              );

            System.out.println("Timi per innsetningu: "+
                               (double)(end-start)/1e9/i
                              );
            start = System.nanoTime();
```

```
58              ResultSet r =
59                  statement.executeQuery
60                      ("SELECT COUNT(*) FROM R WHERE "+
61                          "value BETWEEN 0.01 AND 0.10"
62                      );
63              r.next();
64              end = System.nanoTime();
65              if(USE_INDEX){
66                  System.out.println("Nidurstada leitar med index: "+r.getInt(1));
67                  System.out.println("Timi fyrir leit med index: "+
68                                      (double)(end-start)/1e9
69                                      );
70              }
71              else{
72                  System.out.println("Nidurstada leitar an index: "+r.getInt(1));
73                  System.out.println("Timi fyrir leit an index: "+
74                                      (double)(end-start)/1e9
75                                      );
76              }
77          }
78          catch(SQLException e)
79          {
80              System.err.println(e.getMessage());
81          }
82          finally
83          {
84              try
85              {
86                  if(conn != null) conn.close();
87              }
88              catch(SQLException e)
89              {
90                  System.err.println(e);
91              }
92          }
93      }
94  }
```