

# Trabalho 06 - BD2

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### 1. Compilando e executando o ReadFile.java

```
guilhermekameoka@192 JDBCTutorial % javac ReadFile.java
guilhermekameoka@192 JDBCTutorial % java ReadFile
<<
1001
980.75
4
2011-12-24
759
Pampulha
Pedro Alvares Sousa
>>
insert into debito (numero_debito, valor_debito, motivo_debito, data_debito, numero_conta, nome_agencia, nome_cliente) values (1001, 980.75, '4', '2011-12-24', 759, 'Pampulha', 'Pedro Alvares Sousa');
<<
1002
858.81
5
2012-11-18
34526
Central
Marcos Andrade
>>
insert into debito (numero_debito, valor_debito, motivo_debito, data_debito, numero_conta, nome_agencia, nome_cliente) values (1002, 858.81, '5', '2012-11-18', 34526, 'Central', 'Marcos Andrade');
<<
1003
353.28
5
2011-9-12
62195
Pampulha
Reinaldo Pereira da Silva
>>
insert into debito (numero_debito, valor_debito, motivo_debito, data_debito, numero_conta, nome_agencia, nome_cliente) values (1003, 353.28, '5', '2011-9-12', 62195, 'Pampulha', 'Reinaldo Pereira da Silva');
<<
1004
1422.57
4
2012-7-15
45543
Gameleira
Elvis Fernando Da Silva
>>
insert into debito (numero_debito, valor_debito, motivo_debito, data_debito, numero_conta, nome_agencia, nome_cliente) values (1004, 1422.57, '4', '2012-7-15', 45543, 'Gameleira', 'Elvis Fernando Da Silva');
<<
1005
1302.97
5
2012-3-2
22201
Central
Joaquim Carlos Reis
>>
insert into debito (numero_debito, valor_debito, motivo_debito, data_debito, numero_conta, nome_agencia, nome_cliente) values (1005, 1302.97, '5', '2012-3-2', 22201, 'Central', 'Joaquim Carlos Reis');
<<
1006
268.32
3
2013-11-21
2370
Central
Geraldo Oliveira
>>
insert into debito (numero_debito, valor_debito, motivo_debito, data_debito, numero_conta, nome_agencia, nome_cliente) values (1006, 268.32, '3', '2013-11-21', 2370, 'Central', 'Geraldo Oliveira');
<<
1007
1199.2
4
2010-10-8
42436
Central
Andrade de Freitas
>>
insert into debito (numero_debito, valor_debito, motivo_debito, data_debito, numero_conta, nome_agencia, nome_cliente) values (1007, 1199.2, '4', '2010-10-8', 42436, 'Central', 'Andrade de Freitas');
<<
1008
963.43
```

## 2. Criando a tabela debito pelo pgadmin4

The screenshot shows the pgAdmin 4 web interface. At the top, there's a navigation bar with tabs: Properties, SQL, Statistics, Dependencies, Dependents, and Processes. The user is logged in as IB2/guilhermekameoka@IB2\*. Below the navigation bar, there's a toolbar with icons for file operations, filters, and execution. The main area is divided into two tabs: Query and Query History. The Query tab is active, showing a SQL script to create a table named 'debito'. The script includes columns for 'numero\_debito' (integer, NOT NULL), 'valor\_debito' (double precision, NOT NULL), 'motivo\_debito' (smallint), 'data\_debito' (date), 'numero\_conta' (integer), 'nome\_agencia' (character varying(50)), and 'nome\_cliente' (character varying(80)). It also defines a primary key on 'numero\_debito' and a foreign key constraint 'fk\_debito' that references the 'conta' table's columns 'numero\_conta', 'nome\_agencia', and 'nome\_cliente'. The Messages tab at the bottom shows the successful execution of the 'CREATE TABLE' statement, indicating it was completed in 64 msec.

```
1 CREATE TABLE debito (  
2     numero_debito integer NOT NULL,  
3     valor_debito double precision NOT NULL,  
4     motivo_debito smallint,  
5     data_debito date,  
6     numero_conta integer,  
7     nome_agencia character varying(50),  
8     nome_cliente character varying(80),  
9     PRIMARY KEY (numero_debito),  
10    CONSTRAINT fk_debito FOREIGN KEY (numero_conta, nome_agencia, nome_cliente)  
11    REFERENCES conta(numero_conta, nome_agencia, nome_cliente)  
12 );  
13
```

CREATE TABLE

Query returned successfully in 64 msec.

## 3. Adaptando o MyQueries.java para fazer a inserção dos dados na tabela debito:

```
package com.oracle.tutorial.jdbc;  
  
import java.sql.Connection;  
import java.sql.Date;  
import java.sql.PreparedStatement;  
import java.sql.ResultSet;  
import java.sql.SQLException;  
import java.sql.Statement;  
import java.io.FileReader;  
import java.io.BufferedReader;
```

```
import java.io.FileNotFoundException;
import java.io.IOException;
import java.util.Scanner;

public class MyQueries {

    Connection con;
    JDBCUtilities settings;

    public MyQueries(Connection connArg, JDBCUtilities settingsArg) {
        this.con = connArg;
        this.settings = settingsArg;
    }

    public static void main(String[] args) throws IOException {
        JDBCUtilities myJDBCUtilities;
        Connection myConnection = null;
        if (args[0] == null) {
            System.err.println("Properties file not specified at command line");
            return;
        } else {
            try {
                myJDBCUtilities = new JDBCUtilities(args[0]);
            } catch (Exception e) {
                System.err.println("Problem reading properties file " + args[0]);
                e.printStackTrace();
                return;
            }
        }

        try {
            myConnection = myJDBCUtilities.getConnection();
            MyQueries.populateTable(myConnection);

        } catch (SQLException e) {
            JDBCUtilities.printSQLException(e);
        } finally {
            JDBCUtilities.closeConnection(myConnection);
        }
    }
}
```

```

public static void populateTable(Connection con) throws SQLException,
IOException {
    BufferedReader inputStream = null;
    Scanner scanned_line = null;
    String line;
    String[] value;
    value = new String[7];
    int countv;
    Statement stmt = null;
    String create = "";

    try {
        inputStream = new BufferedReader(
            new FileReader(
                "/Users/guilhermekameoka/Desktop/mydir/JDBCTutorial/BD2-15-debito-populate-table.txt"));

        stmt = con.createStatement();
        stmt.executeUpdate("truncate table debito;");

        while ((line = inputStream.readLine()) != null) {
            countv = 0;

            scanned_line = new Scanner(line);

            scanned_line.useDelimiter("\t");

            while (scanned_line.hasNext()) {
                value[countv++] = scanned_line.next();
            }

            if (scanned_line != null) {
                scanned_line.close();
            }

            create = "insert into debito (numero_debito, valor_debito, motivo_debito,
            data_debito, numero_conta, nome_agencia, nome_cliente) "
            + "values (" + value[0] + ", " + value[1] + ", " + value[2] + ", '" + value[3]
            + "', "
            + value[4] + ", '"
            + value[5] + "', '" + value[6] + "');";
        }
    }
}

```

```

System.out.println("Inserindo na tabela: " + value[0]);

stmt.executeUpdate(create);
}
} catch (FileNotFoundException e) {
e.printStackTrace();
System.out.println("Falha na leitura do arquivo!");
} catch (IOException e) {
e.printStackTrace();
System.out.println("Arquivo não encontrado!");
} catch (SQLException e) {
JDBCUtilities.printStackTrace(e);
} finally {
if (stmt != null) {
stmt.close();
}
}
}
}
}
}

```

#### 4. Editando o arquivo postgres-properties.xml para acessar o novo banco IB2:

```

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE properties SYSTEM "http://java.sun.com/dtd/properties.dtd">
<properties>

    <entry key="dbms">postgres</entry>
    <entry key="driver">org.postgresql.Driver</entry>
    <entry key="database_name">IB2</entry>
    <entry key="user_name">guilhermekameoka</entry>
    <entry key="password">postgres</entry>
    <entry key="server_name">localhost</entry>
    <entry key="port_number">5432</entry>

</properties>

```

#### 5. Adicionando o truncate table debito:

```

public static void populateTable(Connection con) throws SQLException, IOException {
    Statement stmt = null;
    BufferedReader reader = null;

    try {
        stmt = con.createStatement();
        stmt.executeUpdate("truncate table debito;");

        reader = new BufferedReader(new FileReader("/Users/guilhermekameoka/Desktop/mydir/JDBCTutorial/BD2-15-debito-populate-table.txt"));
        String line;

        while ((line = reader.readLine()) != null) {
            String[] values = line.split("\t");

            String insertSQL = String.format(
                "INSERT INTO debito (numero_debito, valor_debito, motivo_debito, data_debito, numero_conta, nome_agencia, nome_cliente) "
                +
                "VALUES (%s, %s, %s, '%s', %s, '%s', '%s');",
                values[0], values[1], values[2], values[3], values[4], values[5], values[6]);
        }
    }
}

```

## 6. Compilando o MyQueries:

```
guilhermekameoka@192 JDBCtutorial % ./comp MyQueries properties/postgres-properties.xml
```

```
Set the following properties:
```

```
dbms: postgresql
```

```
driver: org.postgresql.Driver
```

```
dbName: IB2
```

```
userName: guilhermekameoka
```

```
serverName: localhost
```

```
portNumber: 5432
```

```
Connected to database
```

```
Inserindo na tabela: 1001
```

```
Inserindo na tabela: 1002
```

```
Inserindo na tabela: 1003
```

```
Inserindo na tabela: 1004
```

```
Inserindo na tabela: 1005
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```
Inserindo na tabela: 1006
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Inserindo na tabela: 1007
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Inserindo na tabela: 1008
```

```
Inserindo na tabela: 1009
```

```
Inserindo na tabela: 1010
```

```
Inserindo na tabela: 1011
```

```
Inserindo na tabela: 1012
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Inserindo na tabela: 1013
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Inserindo na tabela: 1014
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Inserindo na tabela: 1015
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Inserindo na tabela: 1016
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Inserindo na tabela: 1017
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Inserindo na tabela: 1018
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Inserindo na tabela: 1019
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Inserindo na tabela: 1020
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Inserindo na tabela: 1021
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Inserindo na tabela: 1022
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Inserindo na tabela: 1023
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Inserindo na tabela: 1024
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Inserindo na tabela: 1025
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Inserindo na tabela: 1026
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Inserindo na tabela: 1059
```

