**(SESSION 2017-2018)**

**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

**DBMS PROJECT REPORT**

**On**

**TELECOMMUNICATION**

**SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF BACHELOR OF ENGINEERING (COMPUTER SCIENCE & ENGINEERING)**

Submitted by

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**ABSTRACT**

Telecommunication is the transmission of signs, signals, messages, words, writings, images and sounds or intelligence of any nature by wire, radio, optical or other electromagnetic systems. Telecommunication occurs when the exchange of information between communication participants includes the use of technology. Customer care is a very important aspect for customer satisfaction for the tele-companies and thus is a growing field.

The project focuses on developing an easy-to-use GUI for customer care executives so that their performance could be maximized. Using this project ,the executive will be able to do all the task assigned to him with ease.

**Algorithm/Procedure:**

1.Import all the moduels and jdbc driver and libraries to connect with sql.

2.create classes and define the functions in the classes.

3.Using java swing make the GUI and connect it with sql tables.

4.Now take the input from the user and store it in database.

5.Show the result.

**Modules:**

**Login:**

1. Create database if it does not exist already.

2. If database exists, connect to the database.

3. Create a table if it does not exist.

4. Fetch username and password from the users.

5. Send a query for checking if the credentials match.

6. If yes, them proceed to the home page and start a session.

7. If no, then say “Invalid Credentials”.

**Register/Add new employee:**

1. Create database if it does not exist already.
2. If database exists, connect to the database.
3. Create a table if it does not exist.
4. Fetch details from the users using a form.
5. Send a query with the fetched details to store in the database.
6. If id already exists, send “Email address already exists”
7. Else, if the user is new, feed the data to the table.

**Main menu:-**

1.Displays all the contents and functionalities

2.Provides a central control

Add Client:-

1.Adds a new customer to the database.

2.Gets the customer details and stores in the database

**Add new Offers:-**

1.Adds new Offers

2.Takes the details and store the offer for the particular mobile number in the database.

**Show Offers:**

1.Retrieve the offer data from database.

2.Displays all the offers available for a particular mobile number

**Update/show client details**

1.Retrieves the client data from database.

2.displays the retrieved data in the form

3.Update the edited data in the database.

**Code:**

**1.Login:**

try{

Integer nempno=Integer.parseInt(jTextField1.getText());

String Query="Select pass from employee where empno="+(nempno)+"; ";

Class.forName("com.mysql.jdbc.Driver");

Connection con=(Connection)DriverManager.getConnection("jdbc:mysql://localhost/dbms","root","20oct1997");

Statement st=con.createStatement();

ResultSet rs=st.executeQuery(Query);

rs.next();

String npass=rs.getString("pass");

String pass=jPasswordField1.getText();

MainMenu m=new MainMenu();

if(npass.equals(pass))

{

this.dispose();

//JFrame.add(m);

m.setVisible(true);

}

else

{

JOptionPane.showMessageDialog(null,"Wrong Password Try Again");

jPasswordField1.setText("");

}

con.close();

}

catch(Exception e)

{

JOptionPane.showMessageDialog(null,"No ID Found");

e.printStackTrace();

}

**Add employee/Register:**

try{

Integer nempno=Integer.parseInt(jTextField1.getText());

String npass=jTextField2.getText();

String nname=jTextField3.getText();

String ndept=jTextField4.getText();

String ndesg=jTextField5.getText();

String Query="insert into employee(empno,pass,name,dept,desg) values ("+(nempno)+",'" + (npass) + "','" + (nname) + "','" + (ndept) + "','" + (ndesg) + "')";

Class.forName("com.mysql.jdbc.Driver");

Connection con=DriverManager.getConnection("jdbc:mysql://localhost/dbms","root","20oct1997");

Statement smt=con.createStatement();

System.out.println("rows effected");

int rowsEffected = smt.executeUpdate(Query);

System.out.println(rowsEffected + "rows effected");

JOptionPane.showMessageDialog(null,"record added");

jTextField1.setText("");

jTextField2.setText("");

jTextField3.setText("");

jTextField4.setText("");

jTextField5.setText("");

}

catch(Exception e)

{

JOptionPane.showMessageDialog(this, e.getMessage());

e.printStackTrace();

}

**ADD new client:**

try{

Integer nphno=Integer.parseInt(jTextField1.getText());

String naddrprf=jTextField3.getText();

String nname=jTextField2.getText();

String nstate=jTextField8.getText();

String ndor=jTextField5.getText();

String naddr=jTextArea1.getText();

String nmail=jTextField6.getText();

jTextField8.setText("");

String Query="insert into client(mobno,name,address\_proof,state,reg\_date,address,email) values ("+(nphno)+",'" + (nname) + "','" + (naddrprf) + "','" + (nstate) + "','" + (ndor) + "','" + (naddr) + "','" + (nmail) + "')";

Class.forName("com.mysql.jdbc.Driver");

Connection con=DriverManager.getConnection("jdbc:mysql://localhost/dbms","root","20oct1997");

Statement smt=con.createStatement();

System.out.println("rows effected");

int rowsEffected = smt.executeUpdate(Query);

System.out.println(rowsEffected + "rows effected");

JOptionPane.showMessageDialog(null,"record added");

jTextField3.setText("");

jTextField1.setText("");

jTextField2.setText("");

jTextField4.setText("");

jTextField5.setText("");

jTextField6.setText("");

jTextArea1.setText("");

}

catch(Exception e)

{

JOptionPane.showMessageDialog(this, e.getMessage());

e.printStackTrace();}

**3.ADD offers**

try{

Integer nmobno=Integer.parseInt(jTextField1.getText());

String nplan=jTextField2.getText();

String nvld=jTextField3.getText();

Integer nprice=Integer.parseInt(jTextField4.getText());

String ndscp=jTextArea1.getText();

String Query="insert into offers(mobno,plan,validity,price,description) values ("+(nmobno)+",'" + (nplan) + "','" + (nvld) + "'," + (nprice) + ",'" + (ndscp) + "')";

Class.forName("com.mysql.jdbc.Driver");

Connection con=DriverManager.getConnection("jdbc:mysql://localhost/dbms","root","20oct1997");

Statement smt=con.createStatement();

System.out.println("rows effected");

int rowsEffected = smt.executeUpdate(Query);

System.out.println(rowsEffected + "rows effected");

JOptionPane.showMessageDialog(null,"record added");

jTextField1.setText("");

jTextField2.setText("");

jTextField3.setText("");

jTextField4.setText("");

jTextArea1.setText("");

}

catch(Exception e)

{

JOptionPane.showMessageDialog(this, e.getMessage());

e.printStackTrace();

}

**4.Show offers:**

try{

Integer nmobno=Integer.parseInt(jTextField1.getText());

String Query="Select \* from offers where mobno="+(nmobno)+"; ";

Class.forName("com.mysql.jdbc.Driver");

Connection con=(Connection)DriverManager.getConnection("jdbc:mysql://localhost/dbms","root","20oct1997");

Statement st=con.createStatement();

ResultSet rs=st.executeQuery(Query);

DefaultListModel m = new DefaultListModel();

jList1.setModel(m);

DefaultListModel m2 = new DefaultListModel();

jList2.setModel(m2);

System.out.println("nprice");

while(rs.next())

{

String nplan=rs.getString("plan");

String nvald=rs.getString("validity");

String nprice=rs.getString("price");

System.out.println("nprice");

m.addElement(nplan+"--"+nvald+"--"+nprice);

m2.addElement(nplan);

}

con.close();

}

catch(Exception e)

{

JOptionPane.showMessageDialog(null,e.getMessage());

e.printStackTrace();

}

}

private void jList1ValueChanged(javax.swing.event.ListSelectionEvent evt) {

}

private void jList2ValueChanged(javax.swing.event.ListSelectionEvent evt) {

String s=jList2.getSelectedValue();

try{

String Query="Select \* from offers where plan like '"+(s)+"'; ";

Class.forName("com.mysql.jdbc.Driver");

Connection con=(Connection)DriverManager.getConnection("jdbc:mysql://localhost/dbms","root","20oct1997");

Statement st=con.createStatement();

ResultSet rs=st.executeQuery(Query);

while(rs.next())

{

String ndsc=rs.getString("description");

jTextArea2.setText(ndsc);

}

con.close();

}

catch(Exception e)

{

JOptionPane.showMessageDialog(null,e.getMessage());

e.printStackTrace();

}

**5.Show client details:**

try{

Integer nmobno=Integer.parseInt(jTextField2.getText());

jTextField2.setEditable(false);

String Query="Select \* from client where mobno="+(nmobno)+"; ";

Class.forName("com.mysql.jdbc.Driver");

Connection con=(Connection)DriverManager.getConnection("jdbc:mysql://localhost/dbms","root","20oct1997");

Statement st=con.createStatement();

ResultSet rs=st.executeQuery(Query);

// DefaultListModel m =(DefaultListModel) jList1.getModel();

rs.next();

String nname=rs.getString("name");

String naddrprf=rs.getString("address\_proof");

String nstate=rs.getString("state");

String ndor=rs.getString("reg\_date");

String naddr=rs.getString("address");

String nmail=rs.getString("email");

jTextField1.setText(naddrprf);

jTextField2.setText(""+nmobno);

jTextField3.setText(nname);

jTextField4.setText(nstate);

jTextField5.setText(ndor);

jTextArea1.setText(naddr);

jTextField6.setText(nmail);

con.close();

}

catch(Exception e)

{

JOptionPane.showMessageDialog(null,e.getMessage());

e.printStackTrace();

}

**6.Update client details:-**

try{

Integer nphno=Integer.parseInt(jTextField2.getText());

String naddrprf=jTextField1.getText();

String nname=jTextField3.getText();

String nstate=jTextField4.getText();

String ndor=jTextField5.getText();

String naddr=jTextArea1.getText();

String nmail=jTextField6.getText();

String Query="update client set name='" + (nname) + "', address\_proof='" + (naddrprf) + "',state='" + (nstate) + "',reg\_date='" + (ndor) + "',address='" + (naddr) + "',email='" + (nmail) + "' where mobno="+(nphno)+";";

Class.forName("com.mysql.jdbc.Driver");

Connection con=DriverManager.getConnection("jdbc:mysql://localhost/dbms","root","20oct1997");

Statement smt=con.createStatement();

System.out.println("rows effected");

int rowsEffected = smt.executeUpdate(Query);

System.out.println(rowsEffected + "rows effected");

JOptionPane.showMessageDialog(null,"record added");

jTextField3.setText("");

jTextField1.setText("");

jTextField2.setText("");

jTextField4.setText("");

jTextField5.setText("");

jTextField6.setText("");

jTextArea1.setText("");

}

catch(Exception e)

{

JOptionPane.showMessageDialog(this, e.getMessage());

e.printStackTrace();

}

}

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {

try{

Integer nmobno=Integer.parseInt(jTextField2.getText());

jTextField2.setEditable(false);

String Query="Select \* from client where mobno="+(nmobno)+"; ";

Class.forName("com.mysql.jdbc.Driver");

Connection con=(Connection)DriverManager.getConnection("jdbc:mysql://localhost/dbms","root","20oct1997");

Statement st=con.createStatement();

ResultSet rs=st.executeQuery(Query);

// DefaultListModel m =(DefaultListModel) jList1.getModel();

rs.next();

String nname=rs.getString("name");

String naddrprf=rs.getString("address\_proof");

String nstate=rs.getString("state");

String ndor=rs.getString("reg\_date");

String naddr=rs.getString("address");

String nmail=rs.getString("email");

jTextField1.setText(naddrprf);

jTextField2.setText(""+nmobno);

jTextField3.setText(nname);

jTextField4.setText(nstate);

jTextField5.setText(ndor);

jTextArea1.setText(naddr);

jTextField6.setText(nmail);

con.close();

}

catch(Exception e)

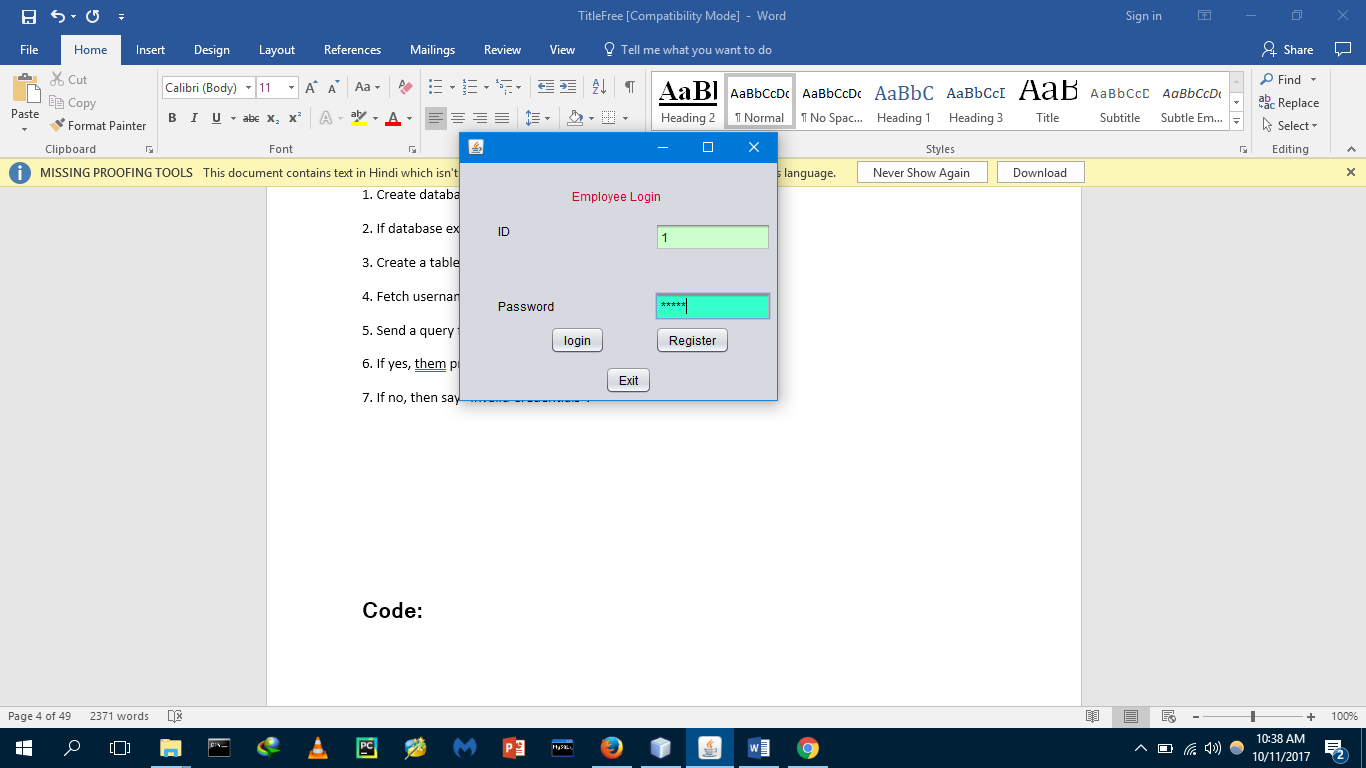
{

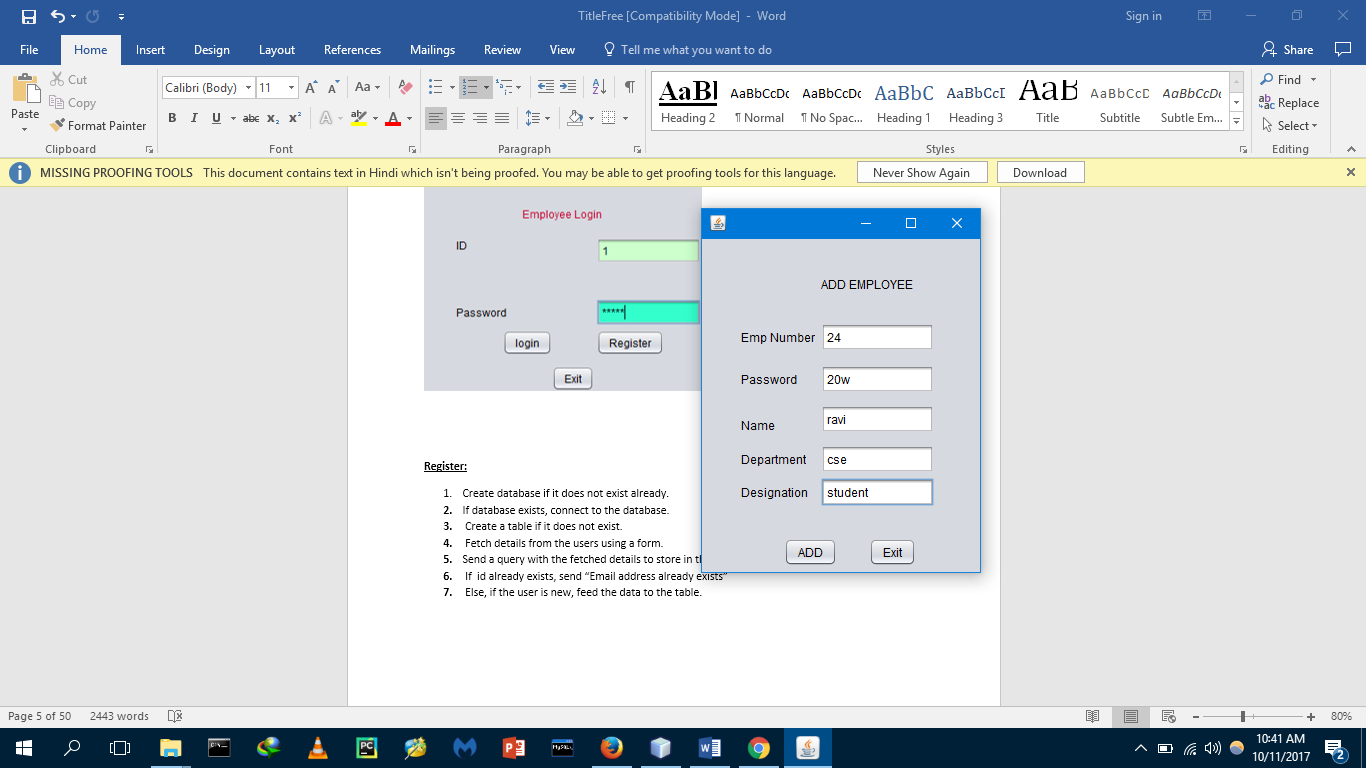
JOptionPane.showMessageDialog(null,e.getMessage());

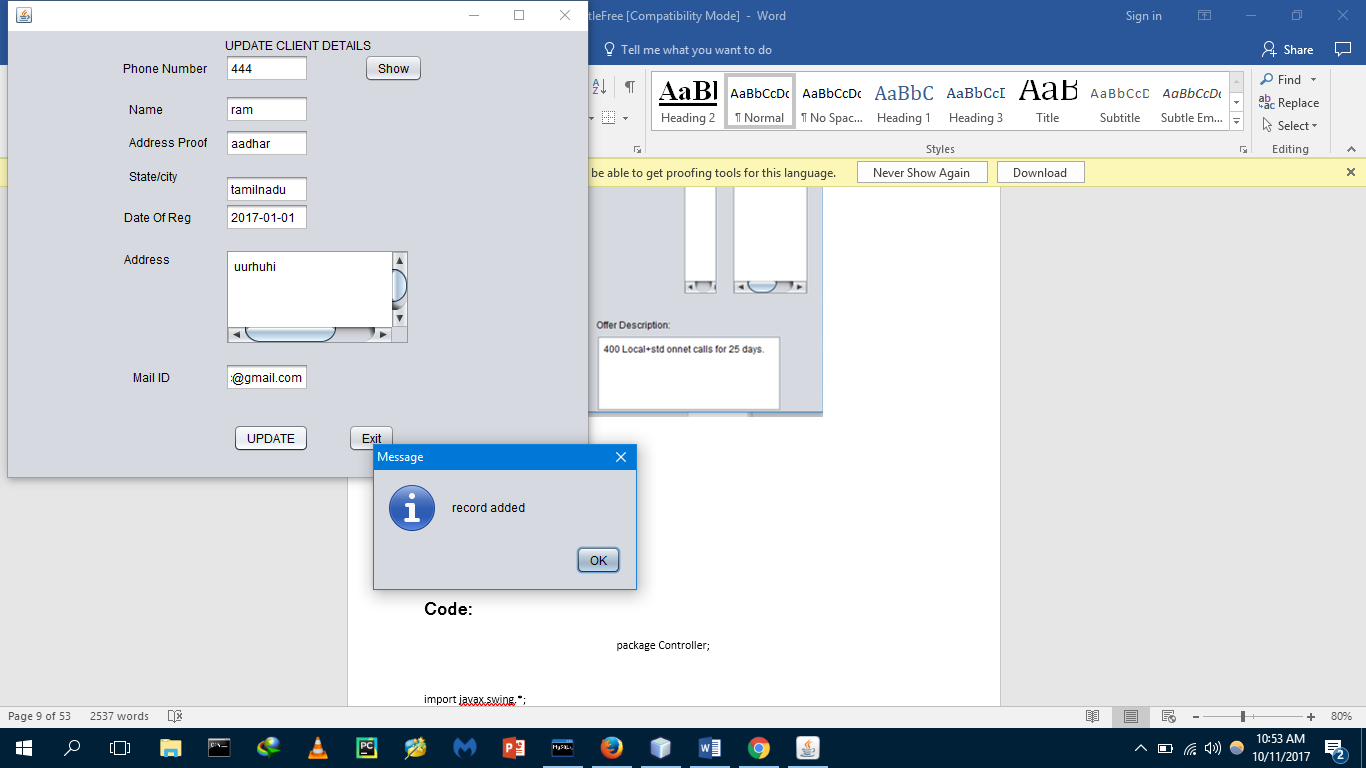
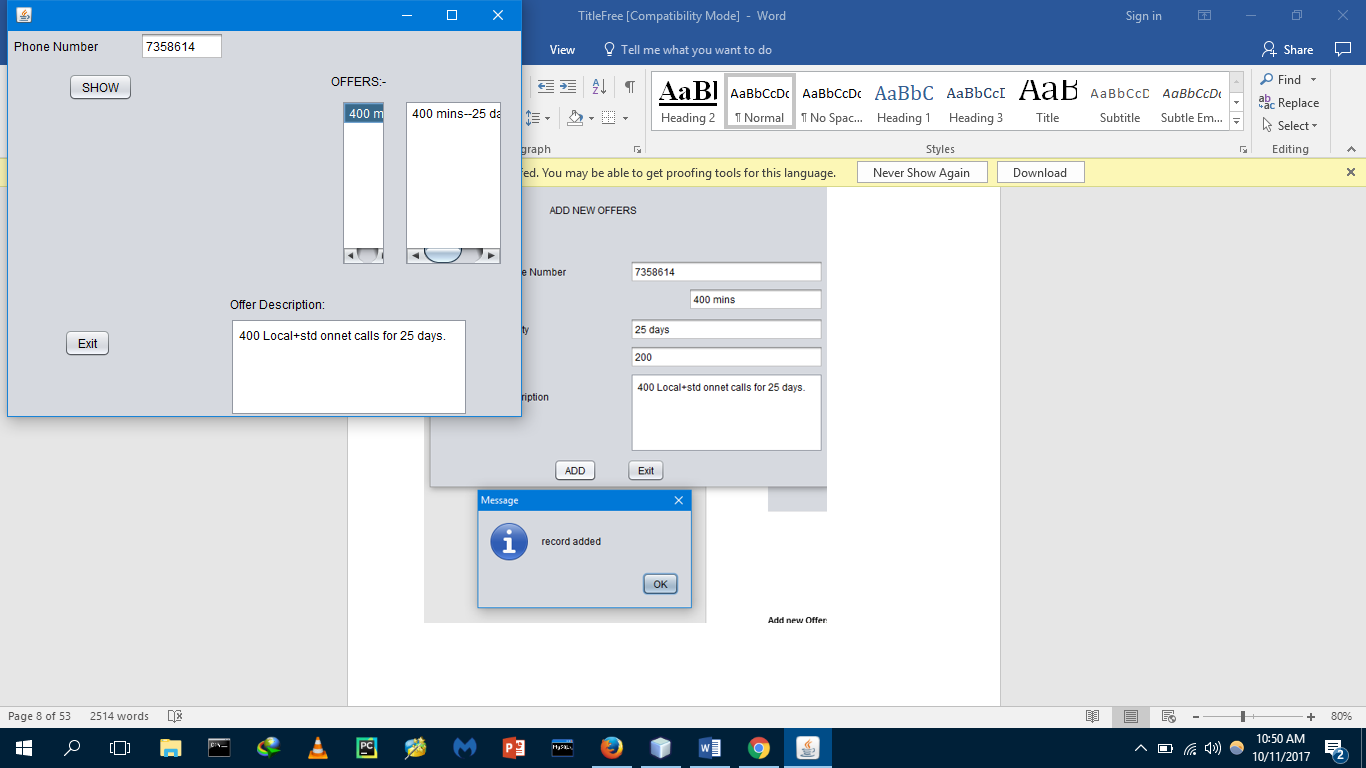
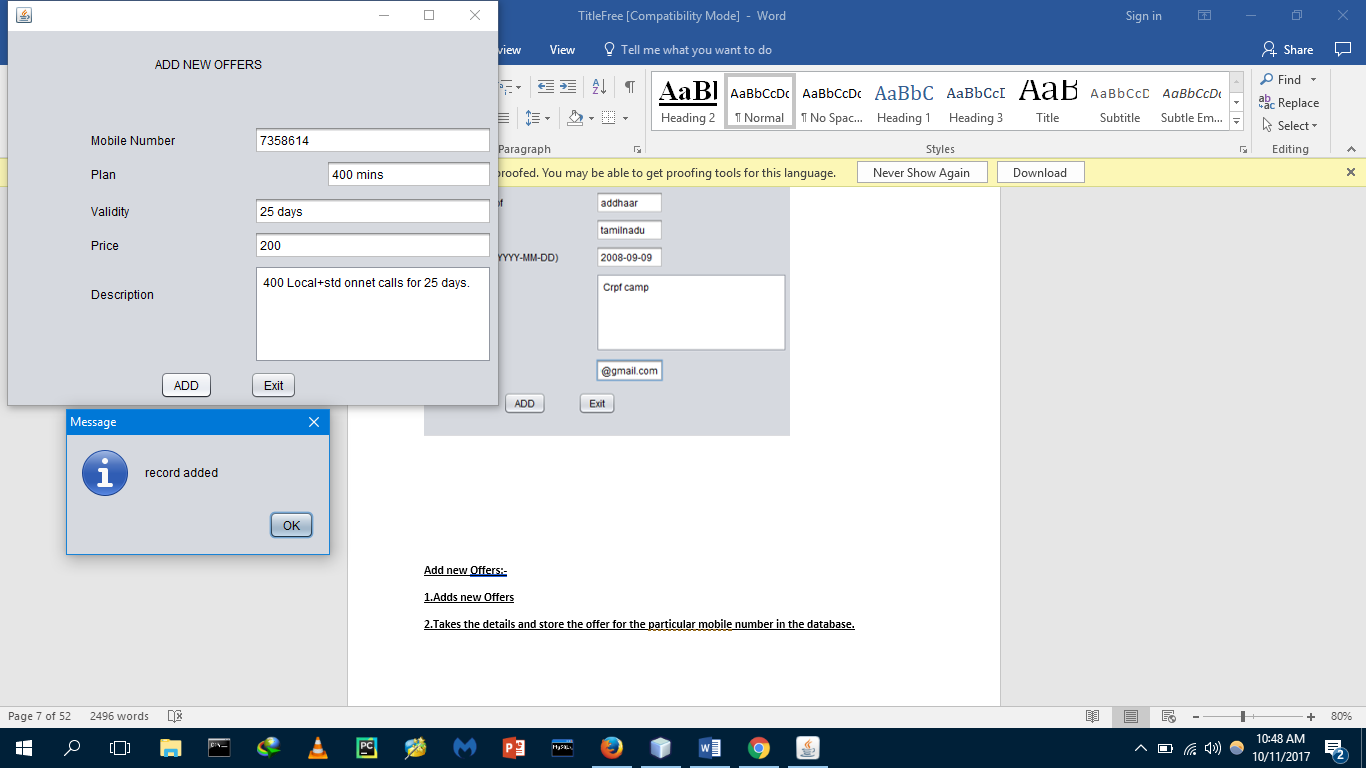
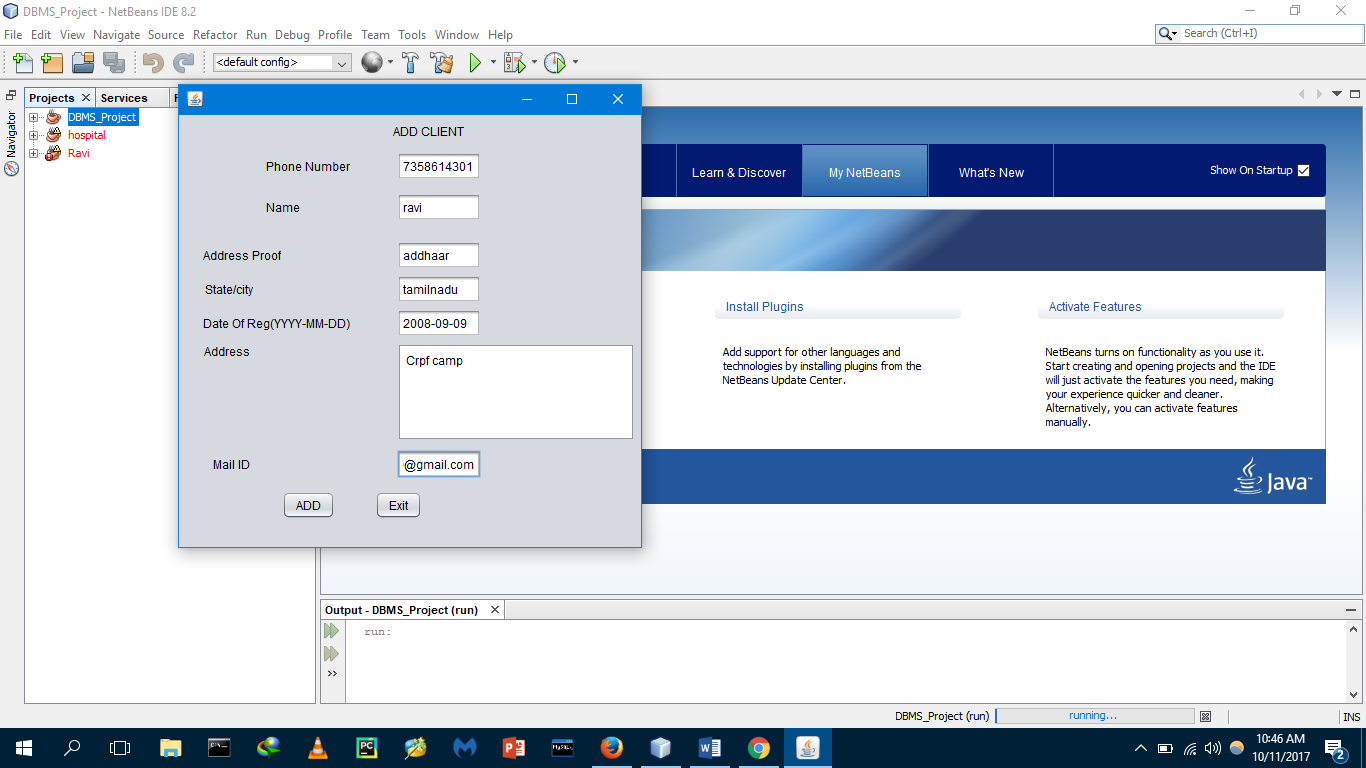
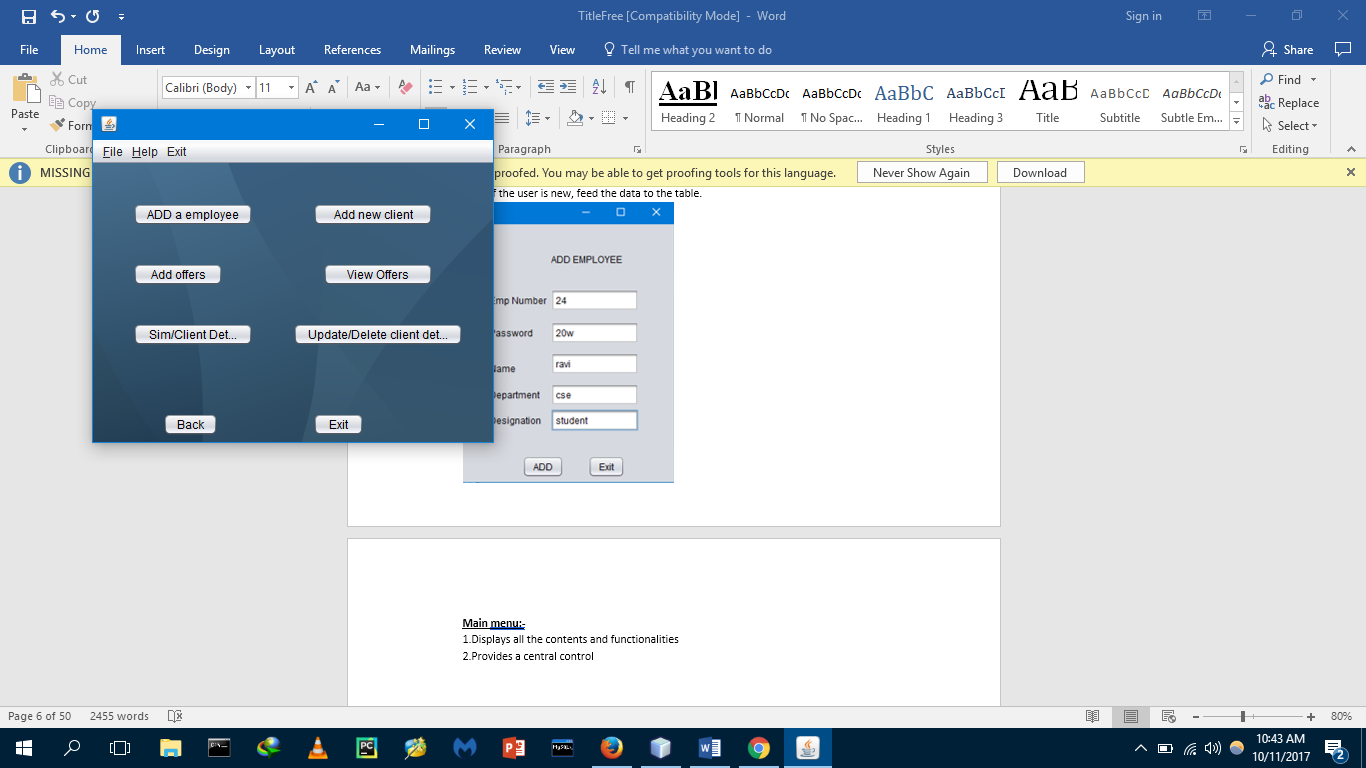
e.printStackTrace();

}

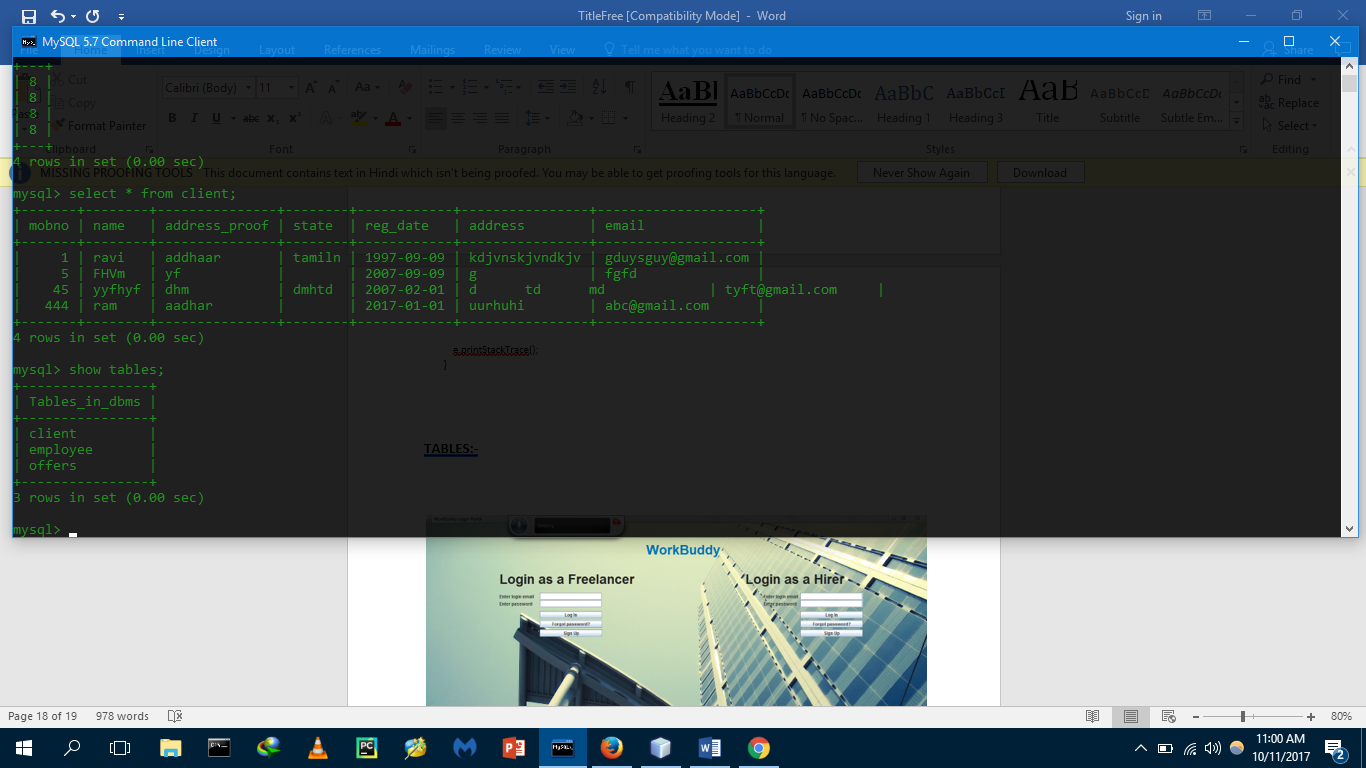
**OUTPUT SCREENSHOTS:-**



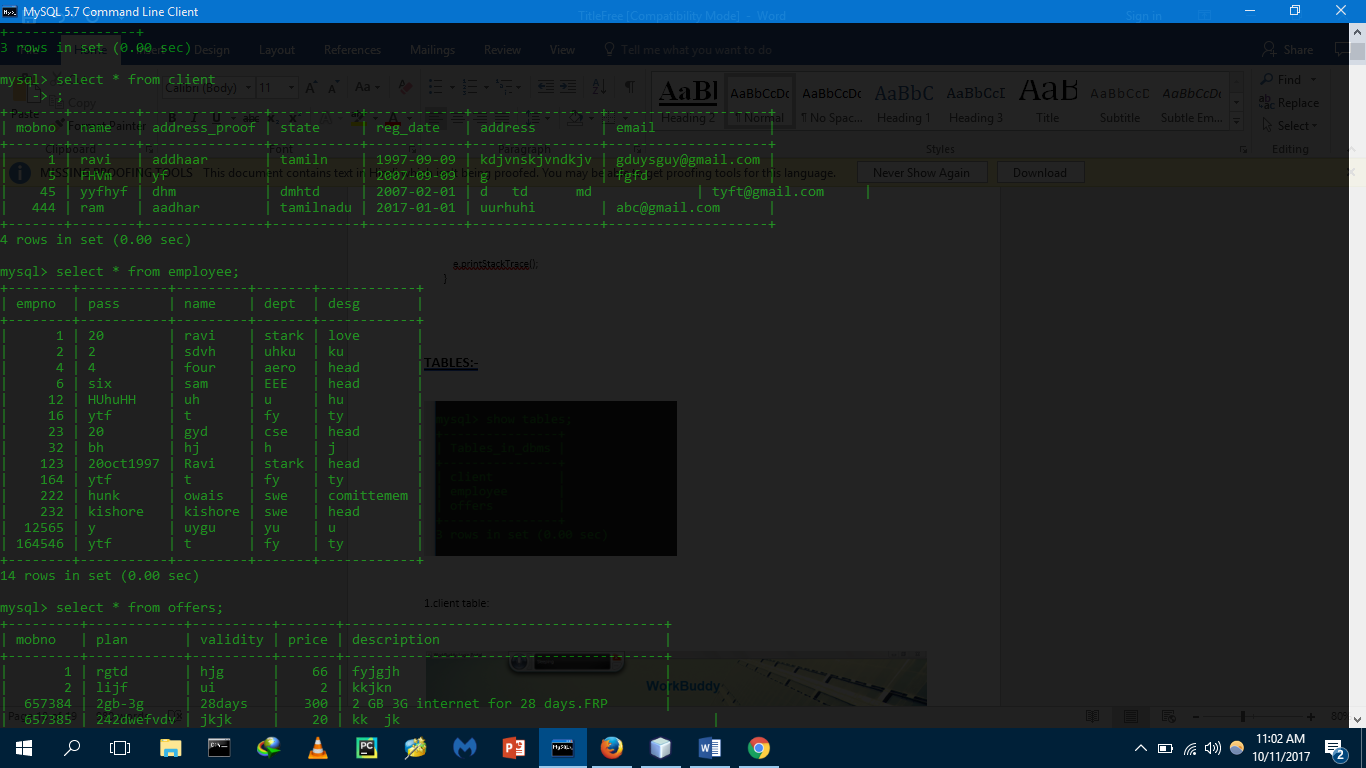




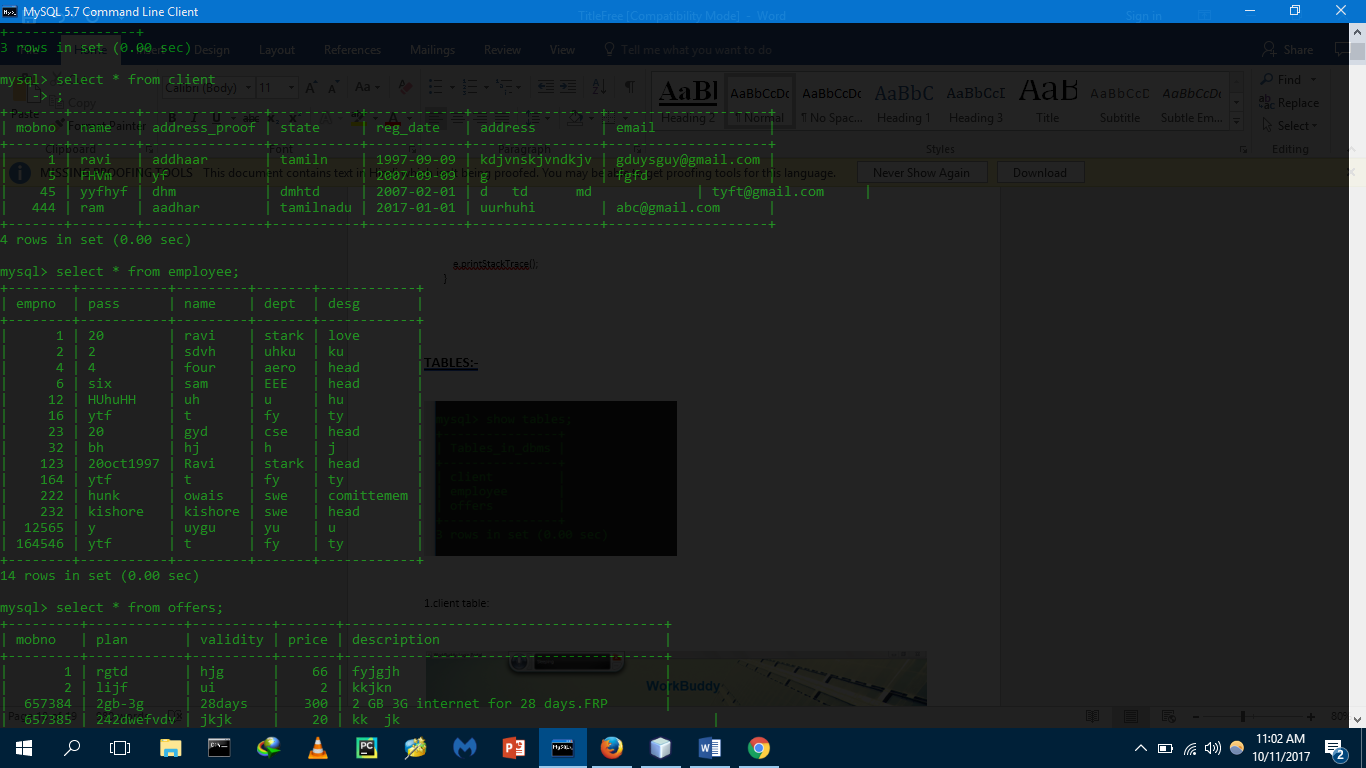
**TABLES:-**



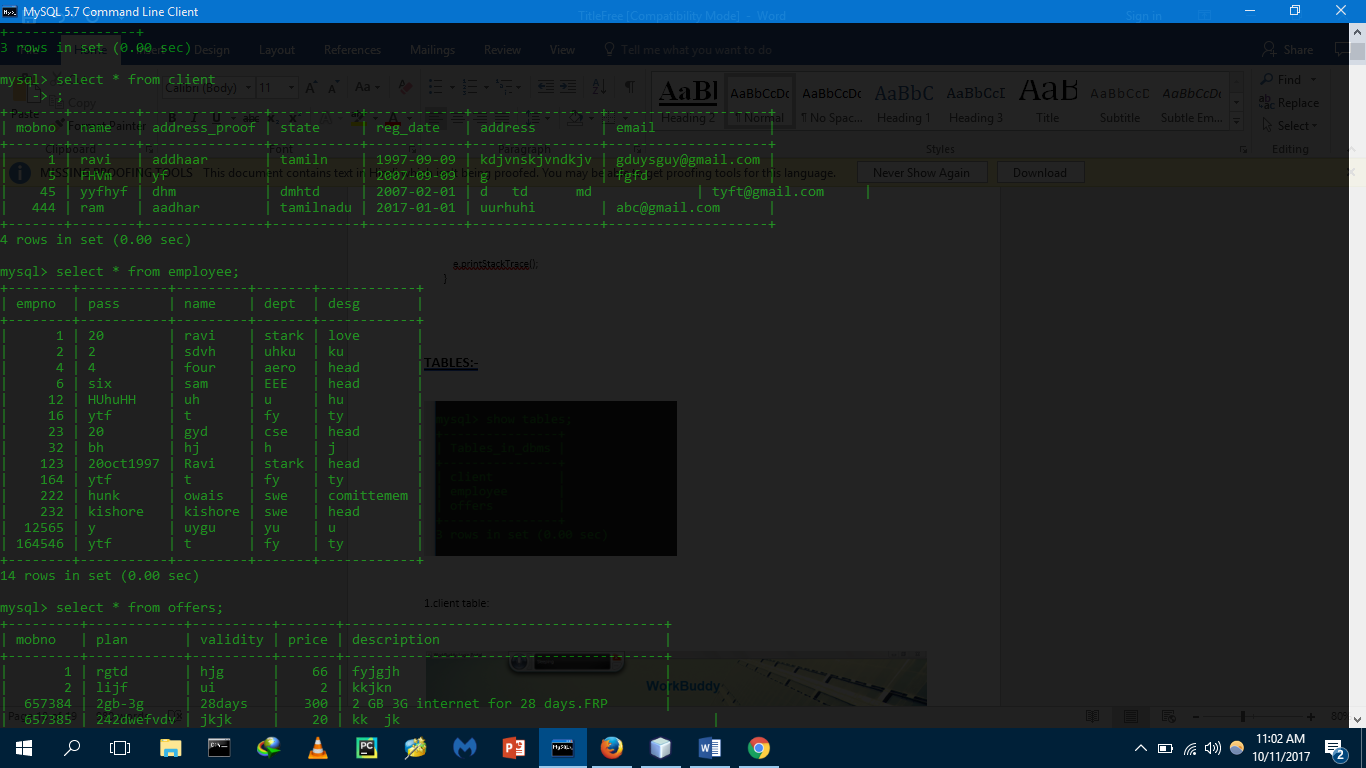
1.client table:



2.Employee table:



Offers table:



**CONCLUSION:**

In all, this telecommunication app is an excellent example to see how the data is stored in a relational database with the Login feature.

This project report contains:

• Registering a new user

• Checking the existence of a user

• Checking the repetition of user

• Authentication using the user login credentials

• Forgot password functionality

This app also stores simple day to day tasks and enables the customer care executives to do their task efficiently.

The features are as followed:

• See offers of a new client

• Add a new customer and his/her details

• Add new offers for customers

• Update customer details

• See Customer details

This project has many day to day applications, and can be evolved to serve many other purposes such as task status, reminder updates, etc.