**Important Codes**

1. **Create the required tables**
2. **Design the form interfaces**
3. **Connect the database**
4. **Add reference to the project**
5. **Coding**

**Common variables, header files and connection string**

using Oracle.DataAccess.Client;

public partial class LOGIN : Form

{

// make common variables global

OracleConnection CON1;

OracleCommand CMD;

string QUERY;

// put the connection string in constructor

public LOGIN()

{

InitializeComponent();

CON1 = new OracleConnection("Data Source=localhost;User ID=m;password=m ");

}

**Insert data into the table**

CON1.Open();

QUERY = "Insert into login values('" + TextBox1.Text + "','" + TextBox2.Text + "')";

CMD = new OracleCommand(QUERY, CON1);

int TEMP = CMD.ExecuteNonQuery();

if (TEMP > 0)

MessageBox.Show(" RECORD ADDED SUCESSFULLY");

else

MessageBox.Show("INSERT OPERATION FAILED ");

con1.Close();

**Delete data from the table**

con1.Open();

query = "delete from LAB where ID='" + TextBox1.Text + "' ";

cmd = new OracleCommand(query, con1);

int TEMP = cmd.ExecuteNonQuery();

if (TEMP > 0)

MessageBox.Show(" RECORD deleted SUCESSFULLY");

else

MessageBox.Show("delete OPERATION FAILED ");

con1.Close();

**Update data from the table**

query = "Update LAB Set PARTICULAR='" + TextBox2.Text + "',NAME\_OF\_SUP='" + TextBox3.Text.ToUpper() + "',ADDRESS='" + TextBox4.Text + "' Where ID='" + TextBox1.Text + "'";

cmd = new OracleCommand(query, con1);

cmd.CommandType = CommandType.Text;

con1.Open();

cmd.ExecuteNonQuery();

// can do the error checking as above codes

MessageBox.Show("Record updated successfully", "MESSAGE");

con1.Close();

**Searching the data:**

1. **Search and display single record values in textboxes or using them for other operations/logics using data reader**

OracleDataReader reader2

query = "select \* from LAB where ID='" + TextBox9.Text + "' ";

cmd = new OracleCommand(query, con1);

con1.Open();

reader2 = cmd.ExecuteReader();

while (reader2.Read())

{

TextBox1.Text = Convert.ToString(reader2["ID"]);

TextBox2.Text = Convert.ToString(reader2["PARTICULAR"]);

TextBox3.Text = Convert.ToString(reader2["NAME\_OF\_SUP"]);

TextBox4.Text = Convert.ToString(reader2["ADDRESS"]);

}

reader2.Close();

con1.Close();

1. **Search and display multiple rows in data grid view using data adapter**

OracleDataAdapter da;

DataSet d;

query = "select \* from LAB WHERE ID= '" + TextBox1.Text + " '";

cmd = new OracleCommand(query, con1);

try

{

con1.Open();

da = new OracleDataAdapter(query, con1);

d = new DataSet();

da.Fill(d, "test");

DataGridView1.DataSource = d.Tables[0];

}

catch (Exception er )

{ MessageBox.Show(er.Message);

}

con1.Close();

**3. Search and display/use a single scalar value**

// this code is used for auto-incrementing the ids

query = "Select max(id) from LAB";

con1.Open();

cmd = new OracleCommand(query, con1);

String ID = Convert.ToString(cmd.ExecuteScalar());

if (ID.Equals(""))

TextBox1.Text = Convert.ToString(1); // first value of id is set to 1

else

{

int s;

s = Convert.ToInt16(ID) + 1; // id is incremented by 1

TextBox1.Text = Convert.ToString(s);

}

con1.Close();