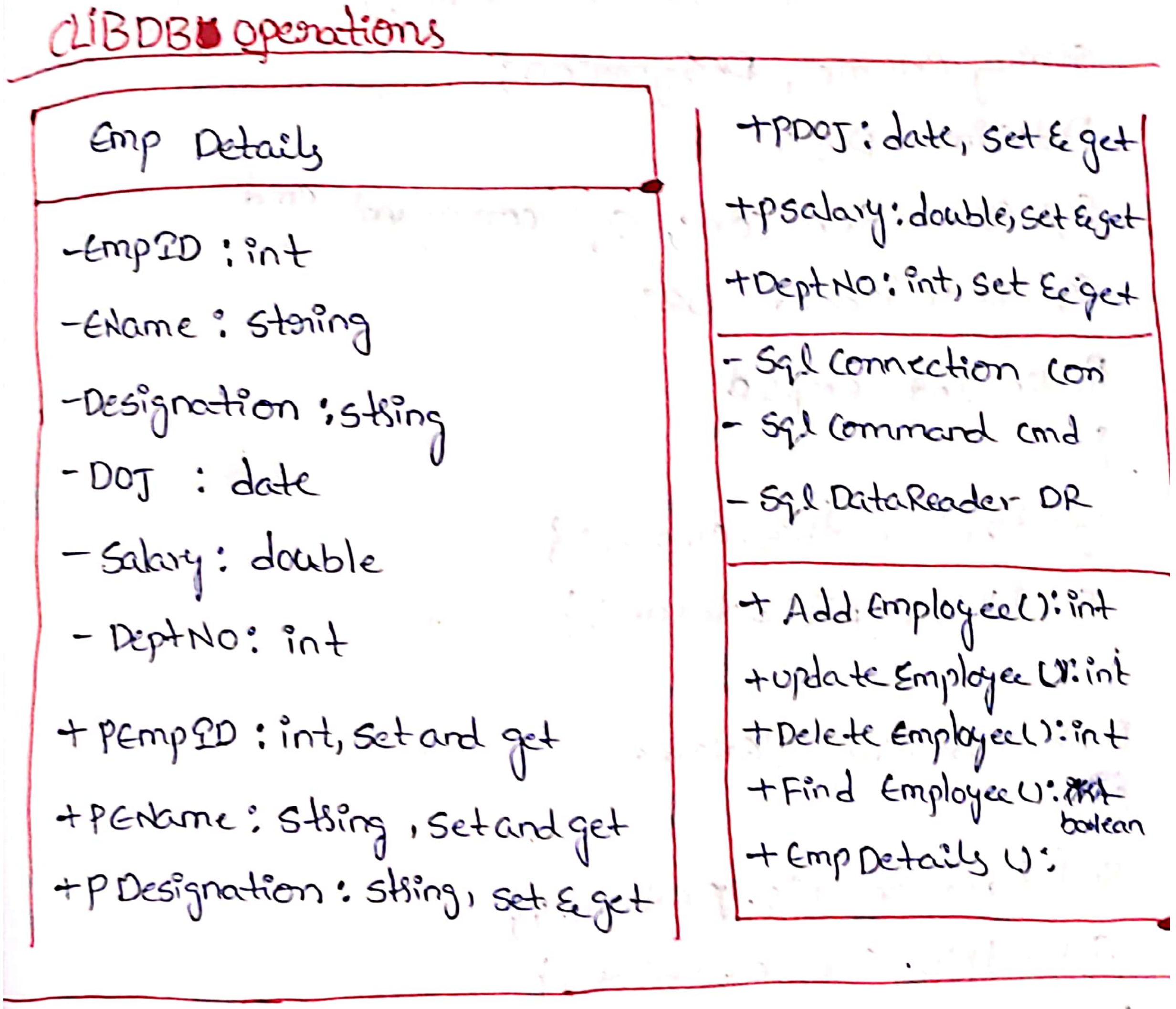
console.WriteLine(x+" To the power" + y +"is" +
obj2.power(x,y));

* Example to Create a component by using properties to perform database operations.



CLiBDB operations

Emp Details

-EmpID : int
-EName : string
-Designation : string
-DOJ : date
-Salary : double
-DeptNo : int

+PEmpID : int, set and get
+PEName : string, set and get
+PDesignation : string, set & get
+PDOJ : date, set & get
+PSalary : double, set & get
+DeptNo : int, set & get

- SqlConnection con
- SqlCommand cmd
- SqlDataReader DR

+ AddEmployee() : int
+ updateEmployee() : int
+ DeleteEmployee() : int
+ Find Employee() : ~~int~~ boolean
+ EmpDetails () :

→ Create a New class library with the Name CLiBDBoperations change the class name to EmpDetails Write the following code.

```
using system.Data;
using system.Data.SQLclient;

namespace CLIBDBoperations
{
 Public class EmpDetails
{
 int EmpID, DeptNo; double Salary;
 String EName, Designation;
 DateTime DOJ;
 Sql connection con; Sql command cmd;
 Sql DataReader DR;
 Public Int EmpId
 {
  get {return this.EmpId;}
  Set{this.emp Id = Value;}
 }
 Public String PEName
 {
  get { return this.PEName;}
  Set { this. EName=Value;}
 }
 Public String PDesignation
 {
 get { return this. Designation;}
 Set { this. Designation= Value;}
 }
 Public DateTime PDOJ
 {
    get {return this. DOJ;}
    Set {this. DOJ = Value;}
  }
 Public double pSalary
 {
   get { return this. salary ;}
   Set { this. Salary = Value; }
 }
 Public Int PDeptno
 {
  get { return this. Deptno;}
  Set{ this. DeptNo = Value;}
 }
 Public EmpDetails ()
 {
 Con = NEW sql Connection (" Server =; user Id = ;");
 }
 Public int Add Employee ()
 {
 string query = "Insert into EmpDetails Values (@P1,
                        @P2, @P3, @P4, @P5, @P6);

 Cmd = NEW sql command (query, con);
 Cmd. Command Type = Command Type. Text;
 Cmd. parameters. Add With Value ("@P1", this. EmpID);
        "         "            ("@P2" , this. EName);
                               ("@P3", this. Designation);
        "         "            ("@P4", this. DOJ);
```

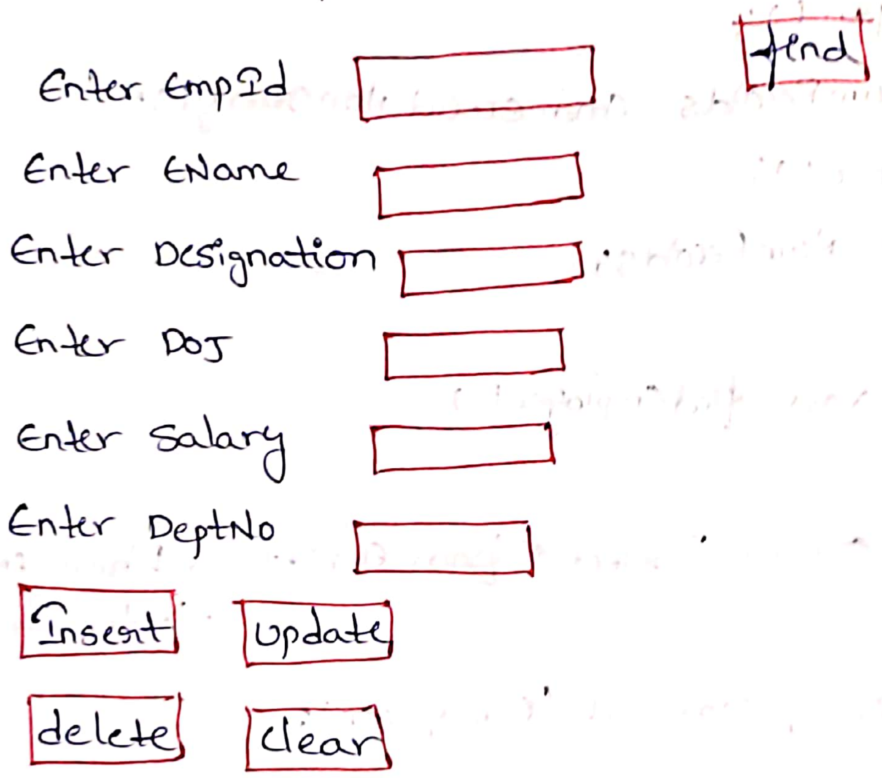
```
                                        ("@P5", this.salary);
        "             "                 ("@P6", this.DeptNo);

Con.open();
int NumRecoords = Cmd. Execute Non Query ();
con.close();
return Num Records;
}
Public int update Employee()
{
String Query = "Update EmpDetails set EName =@P1,
        Designation=@P2 , DOJ=@P3, Salary =@P4,
          DeptNo =@P5 Where EmpId = @P6";
Cmd = new Sql Command (Query, con)
Cmd. Command Type = Command Type. Text;
Cmd. parameters . Add With Value ("@P1", this.EName);
                                        ("@P2", this.Designation);
        "             "                 ("@P3", this. DOJ);
                                        ("@P4", this. salary);
        "             "                 ("@P5", this. Deptno);
        "             "                 ("@P6", this. EmpId);

Con. open ();
int Num Records = Cmd. executeNon Query();
Con. Close ();
return NumRecords ();
}
```

```
Public int Delete Employee ()
{
string Query = " Delete EmpDetails Where EmpId=@P1";
Cmd = new SqlCommand (Query, con);
Cmd. Command Type = Command Type. Text;
Cmd. parameters. Add With Value ("@P1", this. EmpId);
Con. Open ();
int NumRecords = Cmd. ExecuteNonQuery();
Con. Close();
return NumRecords;
}
Public Void findEmployee()
{
string Query = " select * from EmpDetails Where EmpId
                                    =" + this. EmpId ;
Cmd = new Sqlcommand (Query, con);
Cmd. Command Type = Command Type. Text;
Con.open();
DR = Cmd. Execute Reader();
if (DR. Read ())
{
 this. EName = DR[1]. To string ();
       Designation = DR[2]
       DOJ         = ~~DR[3]~~ Convert. ToDateTime(DR[3]);
       Salary      = Convert. To Double (DR[4]);
       Deptno      = Convert. To Int 32 (DR[5]);
}
} Con.close();
```

→ Build the Solution this Will Create CLiBDBoperations .DLL .

→ consuming the database Component from Windows forms Application.

→ Create a NEW Winforms App With the Name WAcheckDB Component. Then design the form



→ Adding reference to database Component.

→ Go to Solution Explorer select references Click With Right Mouse button, Click on add references, click on browse, go to the location, Where CLiBDB operations . DLL is Saved. Select the DLL. click on add, Click on ok. Write the following Code.

```
using CLiBDB operations;

Namespace WA checkDB component
{
Public partial class Form1 : Form
{
EmpDetails objemp = new EmpDetails();
Public Form1()...

Private Void Insert_click(        "        )
              btn
{
objemp.pempId = Convert.ToInt32(txtempId.Text);
Obj emp.pEName = txtEName.Text;
Obj emp.pDesignation = txt Designation.Text;
Obj Emp.DoJ = Convert.ToDateTime(txtDoJ.Text);
Obj Emp. Salary = Convert.Todouble(txt Salary.Text);
Obj Emp. Deptno = Convert.To Int 32(txt deptno.Text);
int i = obj emp. Add Employee();
Message box. show (i + " Row(s) Inserted");
}
Private Void btn update_click(        "        )
{

   Same as before code We need to modify

  Small Code
  int i = objemp. update Employee();
}
```

```
Private void btnFind_click (          ''          ).
{
  objEmp.pEmpId = Convert.ToInt32 (txtEmpId.Text);
  objEmp.FindEmployee();
  txtEName.Text = objEmp.pEName;
 txtDesignation.Text = objEmp.Designation;
 txtDOJ.Text = objEmp.pDOJ.ToString();
 txt salary.Text = objEmp.psalary.ToString();
 txtdeptNo.Text = objEmp.pDeptNo.ToString();
}
Private void btndelete_Click (          ''          )
{
 objEmp.EmpId = Convert.ToInt32 (txtEmpId.Text);
 int i = objEmp.DeleteEmployee();
Messagebox.Show (i+" Record(s) Deleted");
}
```

```
Private void btnFind_click (        ''        )
{
  objEmp.pEmpId = Convert.ToInt32 (txtEmpId.Text);
  objEmp.Find Employee();
  txtEname.Text = objEmp.pEName;
  txtDesignation.Text = objEmp.Designation;
  txtDOJ.Text = objEmp.pDOJ.ToString();
  txt salary.Text = objEmp.psalary.ToString();
  txtdeptNo.Text = objEmp.pDeptNo.ToString();
}
Private void btndelete_Click (        ''        )
{
  objEmp.EmpId = Convert.ToInt32 (txtEmpId.Text);
  int i = objEmp.Delete Employee();
  Message box.Show (i+" Record(s) Deleted");
}
```

* Consuming the database component from WEBApplication
* Create a Website with the Name WebAppcheckDB Component.
* Design the Webform or Webpage.

Enter EmpId	
Enter EName	
Enter Designation	
Enter DOJ	
Enter Salary	
Enter Deptno	

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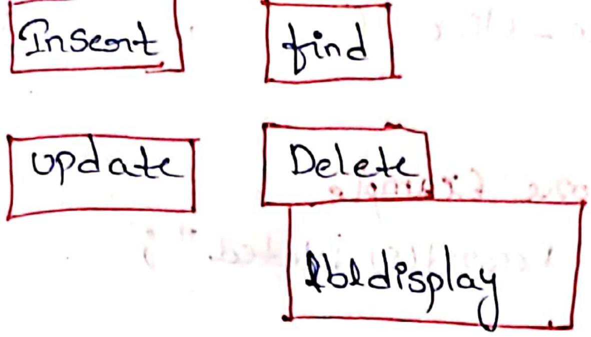

* Add reference to CLIBDBoperations . DLL Write the following code.

```
Using CLIBDB operations

EmpDetails objemp = new EmpDetails ();

Protected void btn Insert _click (   ''   )
{
  Same code What We have to Write Insert
  button code in before example.
} Small change insert button last line
  lbl display. Text = i + " Record(s) Inserted";
}

Protected void btn Find ~~employee~~_click (   "   )
{
  Same code for find Employee in before Example.
}

Protected void btnupdate _ click   (   "   )
{
  Same code for before Example
  lbl display. Text = i+" Record (s) updated";
}
```

```
Protected void btndelete_Click (
{
  Same code for before Example.
  lbldisplay . Text = i + "Record(S) deleted" ;
}
```

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