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24MCA0242

DATE: 12-SEP-2024

Q1:

CODE:

```
package databasedemo;

import java.sql.*;

import java.util.Scanner;

public class DatabaseDemo {

    static Connection con;

    static Statement st;

    static String url = "jdbc:derby://localhost:1527/demo";

    static String uname = "akash";

    static String pwd = "akash";

    public static void main(String[] args) {

        int n,emp_id,basic_pay,da,ded,ns;

        String emp_name;

        try{

            con = DriverManager.getConnection(url,uname,pwd);

            st = con.createStatement();

            Scanner sc = new Scanner(System.in);
```

```
System.out.println("Enter the Employee ID: ");

emp_id=sc.nextInt();

sc.nextLine();

System.out.println("Enter the Employee Name: ");

emp_name=sc.nextLine();

System.out.println("Enter the Basic Pay: ");

basic_pay=sc.nextInt();

System.out.println("Enter the Dearness Allowance: ");

da=sc.nextInt();

System.out.println("Enter the deductions(DED): ");

ded=sc.nextInt();

ns=basic_pay+da-ded;

String query = "insert into employee values("+emp_id+", '"+emp_name+"',
"+basic_pay+", "+da+", "+ded+", "+ns+")";

n = st.executeUpdate(query);

if(n>0 )

    System.out.println("1 new record inserted");

else

    System.out.println("Error in insertion");

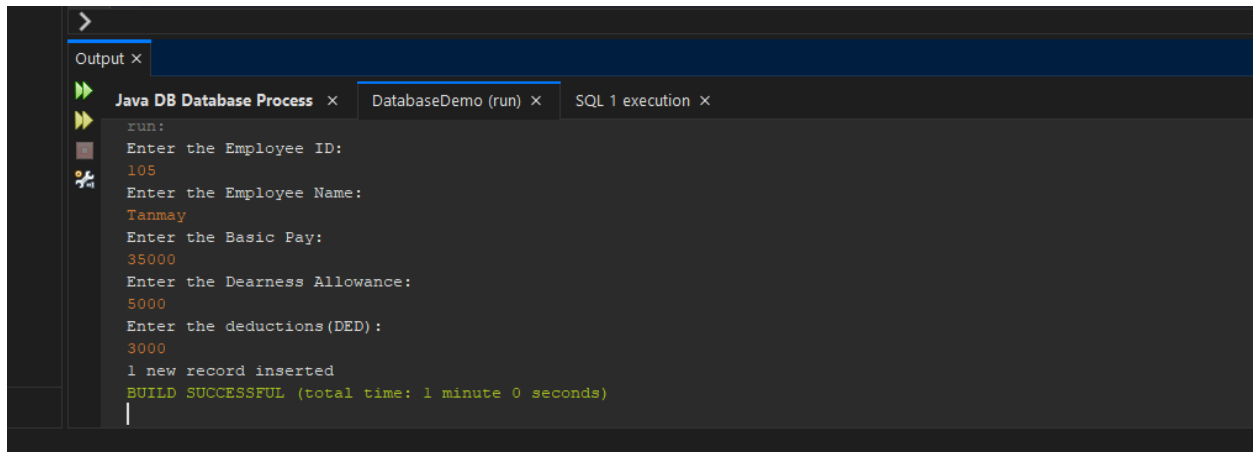
}catch(SQLException e){

    System.out.println("Exception: "+e);

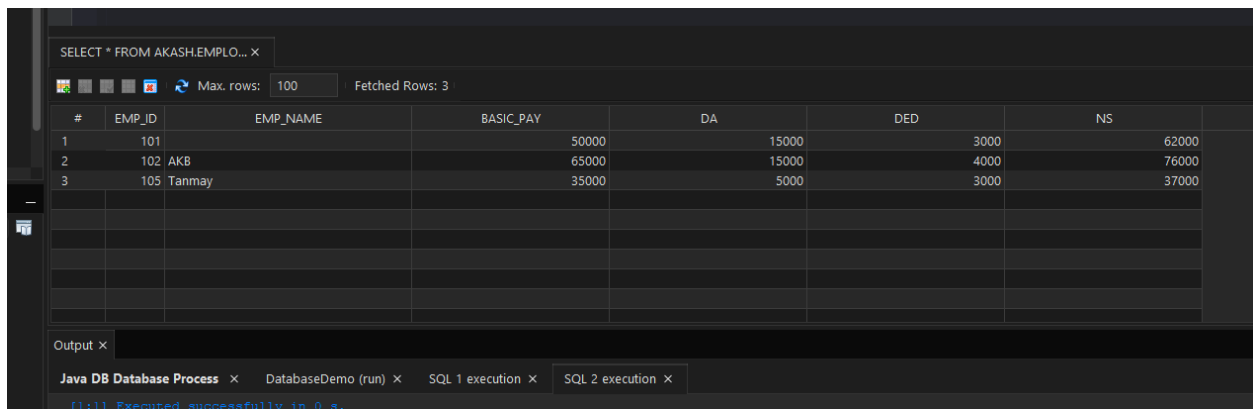
}
```

```
}  
  
}
```

OUTPUT:



```
run:  
Enter the Employee ID:  
105  
Enter the Employee Name:  
Tanmay  
Enter the Basic Pay:  
35000  
Enter the Dearness Allowance:  
5000  
Enter the deductions (DED) :  
3000  
1 new record inserted  
BUILD SUCCESSFUL (total time: 1 minute 0 seconds)
```



#	EMP_ID	EMP_NAME	BASIC_PAY	DA	DED	NS	
1	101		50000	15000	3000		62000
2	102	AKB	65000	15000	4000		76000
3	105	Tanmay	35000	5000	3000		37000

```
[1:1] Executed successfully in 0 s.
```

Q2:

CODE:

```
package databasedemo;  
  
import java.sql.*;  
  
import java.util.Scanner;  
  
public class DatabaseDemo {
```

```
static Connection con;

static Statement st;

static String url = "jdbc:derby://localhost:1527/demo";

static String uname = "akash";

static String pwd = "akash";

public static void main(String[] args) {

    int n, emp_id, basic_pay, da, ded, ns;

    String emp_name;

    try {

        con = DriverManager.getConnection(url, uname, pwd);

        st = con.createStatement();

        Scanner sc = new Scanner(System.in);

        System.out.println("Enter the Employee ID: ");

        emp_id = sc.nextInt();

        sc.nextLine();

        System.out.println("Enter the Employee Name: ");

        emp_name = sc.nextLine();

        System.out.println("Enter the Basic Pay: ");

        basic_pay = sc.nextInt();

        System.out.println("Enter the Dearness Allowance: ");

        da = sc.nextInt();

        System.out.println("Enter the deductions(DED): ");

        ded = sc.nextInt();
```

```

ns = basic_pay + da - ded;

String insertQuery = "INSERT INTO employee VALUES(" + emp_id + ", " + emp_name
+ ", " + basic_pay + ", " + da + ", " + ded + ", " + ns + ")";

n = st.executeUpdate(insertQuery);

if (n > 0)

    System.out.println("1 new record inserted");

else

    System.out.println("Error in insertion");

String selectQuery = "SELECT * FROM employee";

ResultSet rs = st.executeQuery(selectQuery);

System.out.println("\nEmployee Table:");

System.out.println("Emp_ID | Emp_Name | Basic_Pay | DA | DED | Net_Salary");

System.out.println("-----");

while (rs.next()) {

    System.out.print(rs.getInt("emp_id") + " | ");

    System.out.print(rs.getString("emp_name") + " | ");

    System.out.print(rs.getInt("basic_pay") + " | ");

    System.out.print(rs.getInt("da") + " | ");

    System.out.print(rs.getInt("ded") + " | ");

    System.out.println(rs.getInt("ns"));

}

rs.close();

} catch (SQLException e) {

```

```

        System.out.println("Exception: " + e);
    }
}
}

```

OUTPUT:

```

databasedemo.DatabaseDemo >
Output x
Java DB Database Process x DatabaseDemo (run) x SQL 5 execution x
run:
Enter the Employee ID:
805
Enter the Employee Name:
Ranjith
Enter the Basic Pay:
45000
Enter the Dearness Allowance:
10000
Enter the deductions (DED):
4500
1 new record inserted

```

```

databasedemo.DatabaseDemo >
Output x
Java DB Database Process x DatabaseDemo (run) x SQL 5 execution x
4500
1 new record inserted

Employee Table:
Emp_ID | Emp_Name | Basic_Pay | DA | DED | Net_Salary
-----
902 | Raja | 68000 | 5000 | 3500 | 69500
805 | Ranjith | 45000 | 10000 | 4500 | 50500
101 |  | 50000 | 15000 | 3000 | 62000
102 | AKB | 65000 | 15000 | 4000 | 76000
105 | Tanmay | 35000 | 5000 | 3000 | 37000
901 | abc | 7000 | 2000 | 1000 | 8000
BUILD SUCCESSFUL (total time: 32 seconds)

```