

## EXPERIMENT 28

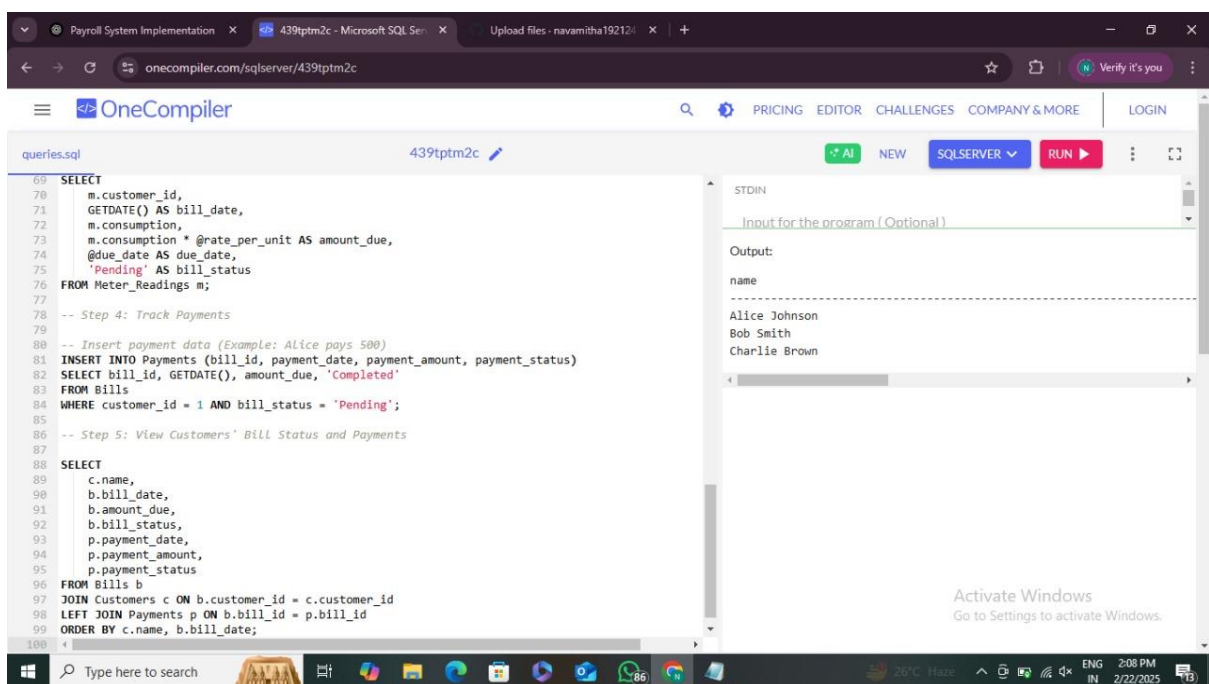
### Aim:

To develop an **electricity bill calculation system** using ASP.NET and SQL.

### Procedure:

1. Create a **SQL database** with a Customers table (CustomerID, Name, UnitsConsumed).
2. Implement **billing logic**:
  - 0-100 units → ₹3 per unit
  - 101-300 units → ₹5 per unit
  - Above 300 units → ₹7 per unit
3. Add a **form (WebForm1.aspx)** to enter customer details and units consumed.
4. Calculate and display the bill amount.

### Output:



The screenshot shows the OneCompiler web interface. The left pane contains a SQL query in a file named 'queries.sql'. The query is as follows:

```
69 SELECT
70     m.customer_id,
71     GETDATE() AS bill_date,
72     m.consumption,
73     m.consumption * @rate_per_unit AS amount_due,
74     @due_date AS due_date,
75     'Pending' AS bill_status
76 FROM Meter_Readings m;
77
78 -- Step 4: Track Payments
79
80 -- Insert payment data (Example: Alice pays 500)
81 INSERT INTO Payments (bill_id, payment_date, payment_amount, payment_status)
82 SELECT bill_id, GETDATE(), amount_due, 'Completed'
83 FROM Bills
84 WHERE customer_id = 1 AND bill_status = 'Pending';
85
86 -- Step 5: View Customers' Bill Status and Payments
87
88 SELECT
89     c.name,
90     b.bill_date,
91     b.amount_due,
92     b.bill_status,
93     p.payment_date,
94     p.payment_amount,
95     p.payment_status
96 FROM Bills b
97 JOIN Customers c ON b.customer_id = c.customer_id
98 LEFT JOIN Payments p ON b.bill_id = p.bill_id
99 ORDER BY c.name, b.bill_date;
```

The right pane shows the 'Output' section with the following results:

name
Alice Johnson
Bob Smith
Charlie Brown

The bottom of the image shows a Windows taskbar with the date 2/22/2025 and time 2:08 PM.

### Result:

An **electricity bill preparation system** was successfully developed.