**PROJECT REPORT**

**on**

**Restaurant Management System**

**Submitted To:**

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**Submitted By:**

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Course: Database Management Systems (DBMS)

Semester:2nd Semester - BSCS

**Restaurant Management System**

# 1. Introduction

## Purpose

The purpose of this project is to design and develop a Restaurant Management System that streamlines day-to-day restaurant operations such as customer management, order placement, billing, reservations, and employee management. The system aims to reduce manual work and improve efficiency and accuracy.

## Project Scope

The system will manage customer details, menu items, table reservations, order processing, bill generation, and employee records. The scope is limited to in-house restaurant operations and does not include food delivery services.

# 2. Overall Product Description

## Functions

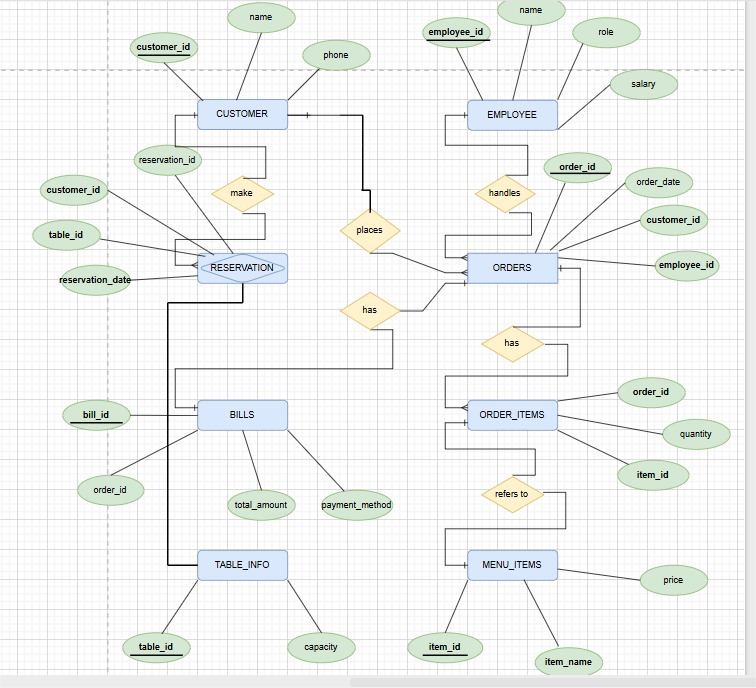
* Maintain customer records.
* Display menu items with prices.
* Take and manage customer orders.
* Generate itemized bills automatically.
* Reserve tables for customers.
* Manage employee data including roles and salaries.

## Operating Environment

* Database: Oracle 10g
* Frontend : Java, PHP, or C#
* Operating System: Windows or Linux
* Hardware Requirements: A basic PC with 4 GB RAM and 20 GB disk space

# 3. Design

## ERDs (Entity-Relationship Diagrams)



## Implementation Constraints

* Each table will have a Primary Key (e.g., Customer\_ID, Order\_ID).
* Foreign Keys will enforce relationships (e.g., Order.Customer\_ID → Customer.Customer\_ID).
* Oracle-compatible data types like NUMBER, VARCHAR2, and DATE will be used

# 4. Requirements

## Functional Requirements

* Register and manage customer profiles
* View and update the menu with item prices
* Process customer orders with multiple items
* Automatically calculate and generate bills
* Manage reservations and table availability
* Record employee information and roles

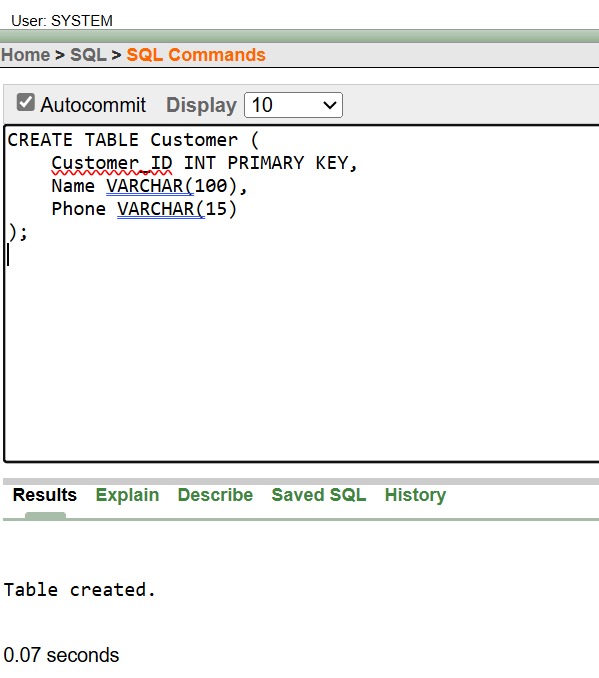
## Non-Functional Requirements

* Performance: The system should handle multiple users without lag
* Security: Access should be restricted to authorized users
* Usability: Interface should be intuitive and easy to use
* Scalability: The system should support future feature additions

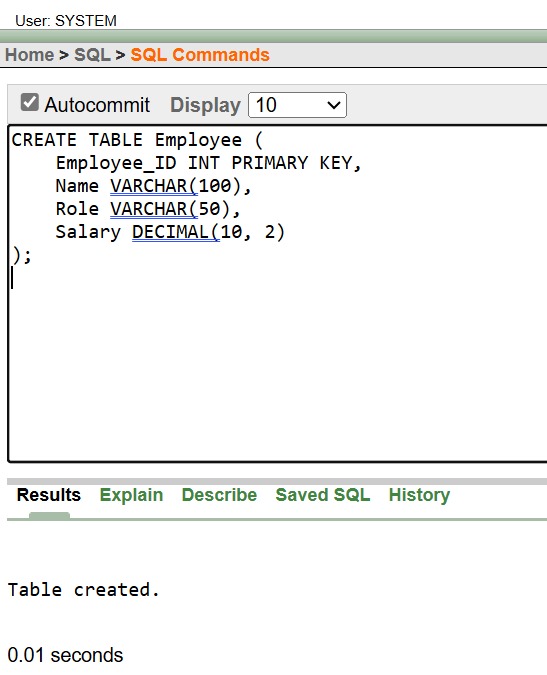
# 5. User Interface

## Creating Tables:

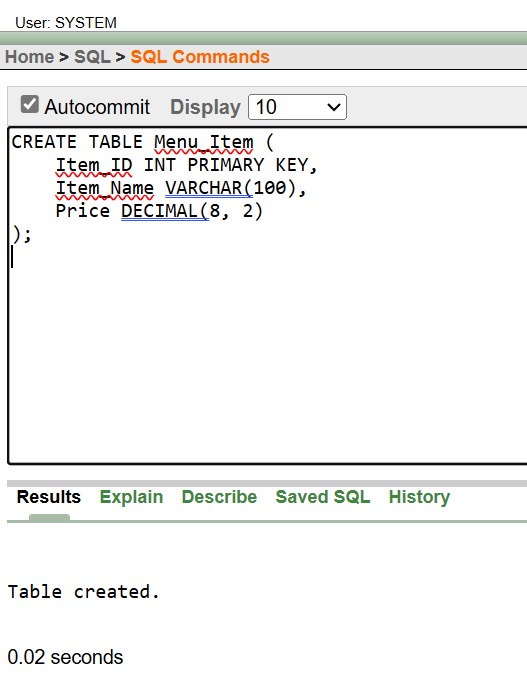
**Customer Table Creation:**



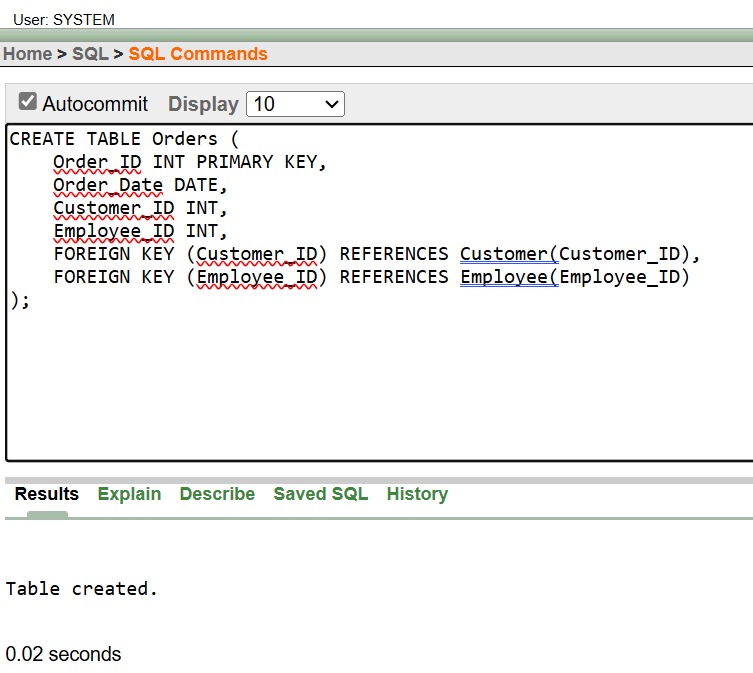
**Employee Table creation:**

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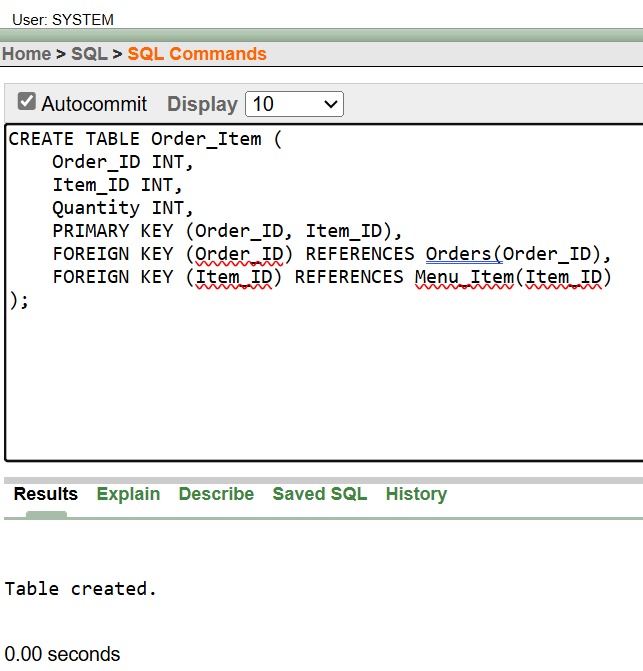
**Menu-item table creation:**



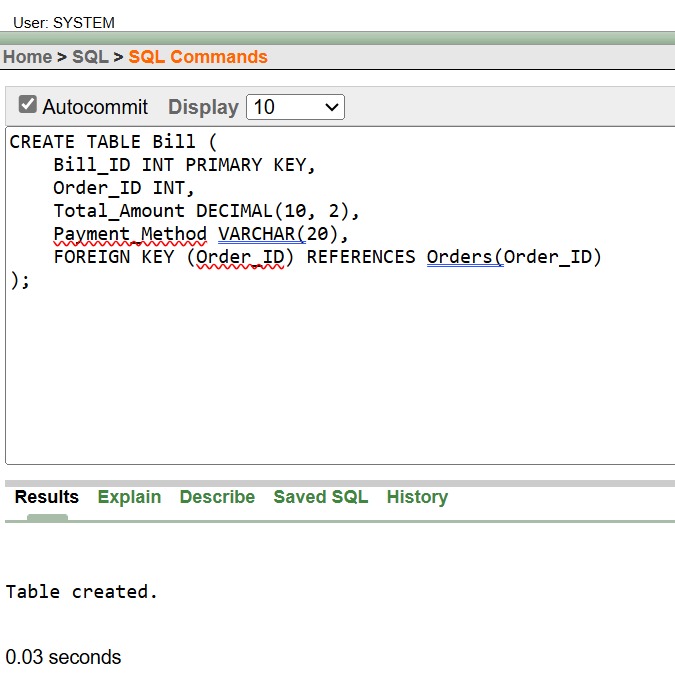
**Orders table Creation:**



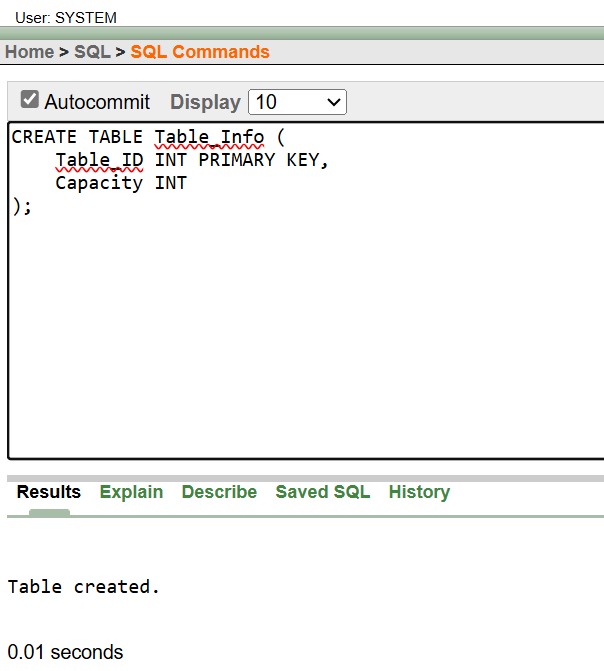
**Order-item table Creation:**



**Bill Table Creation**:



**Table-Info Creation:**



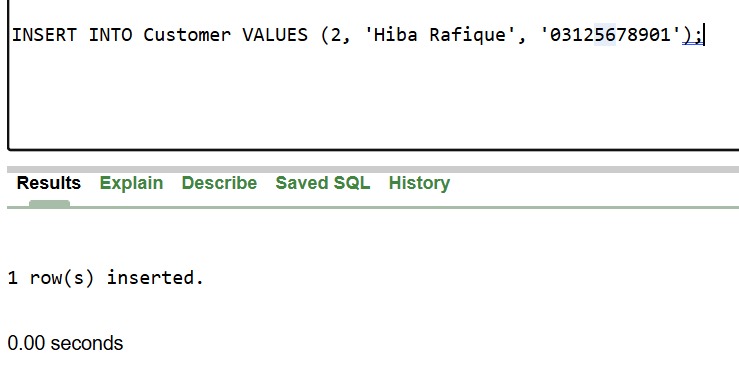
**Reservation table creation**:

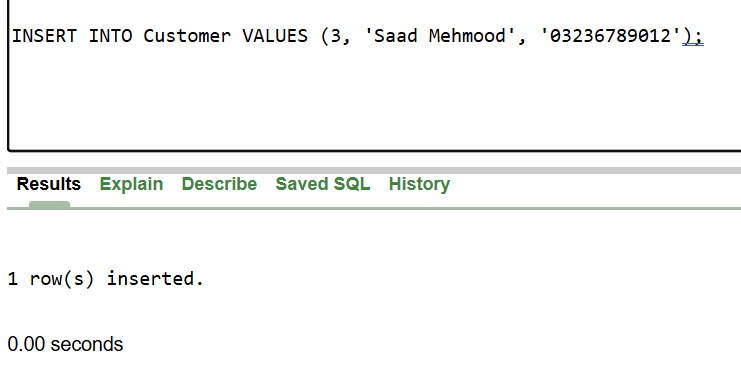
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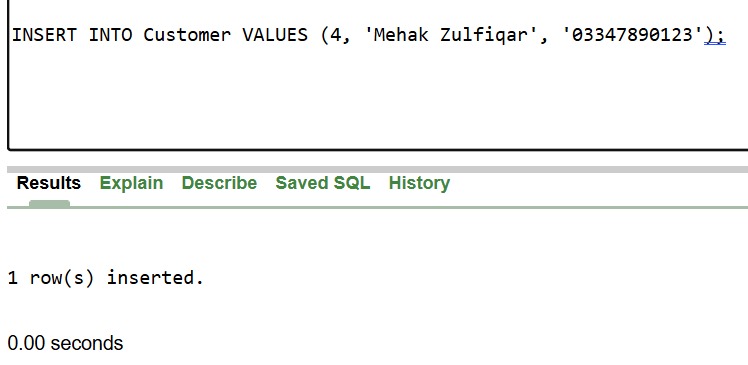
## Insertion:

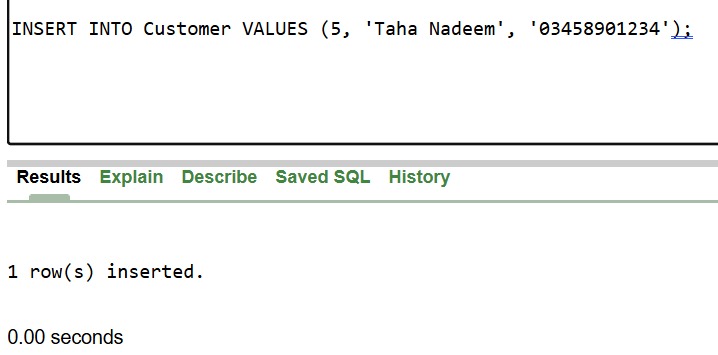
## Insert record into Customer:

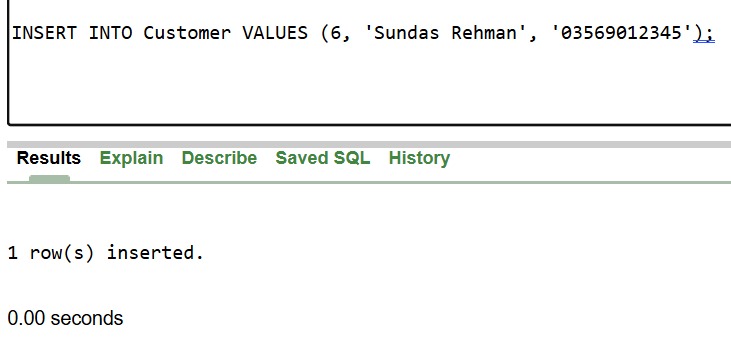
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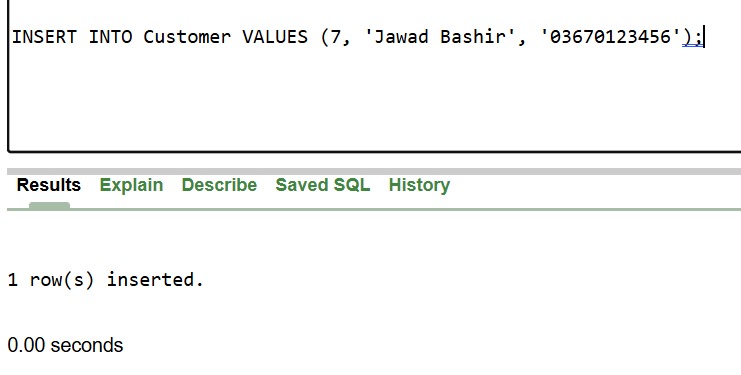
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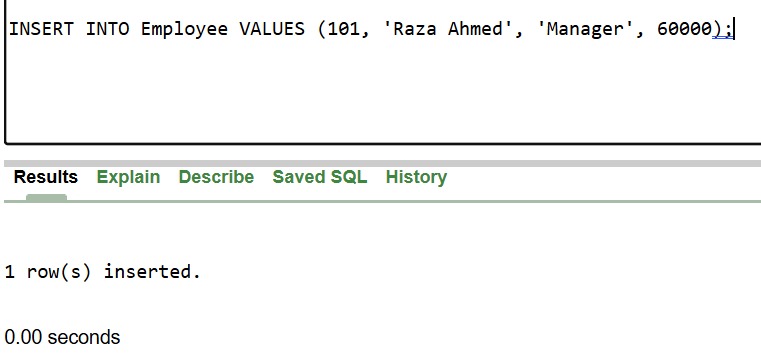
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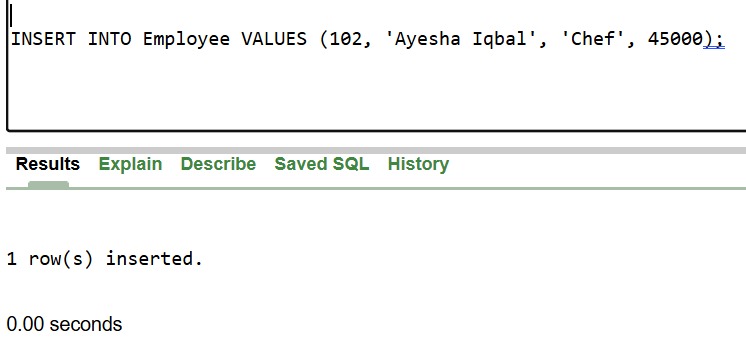
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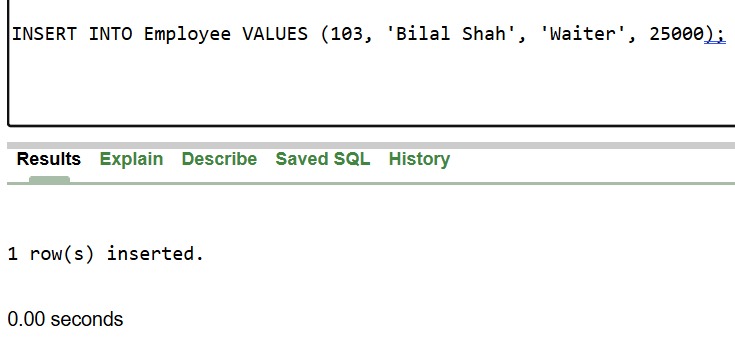
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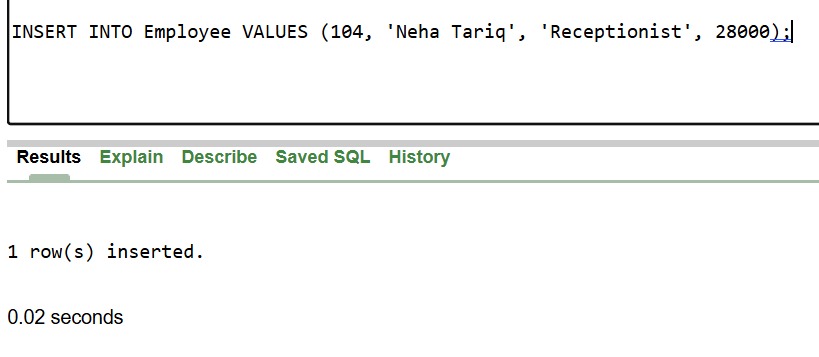
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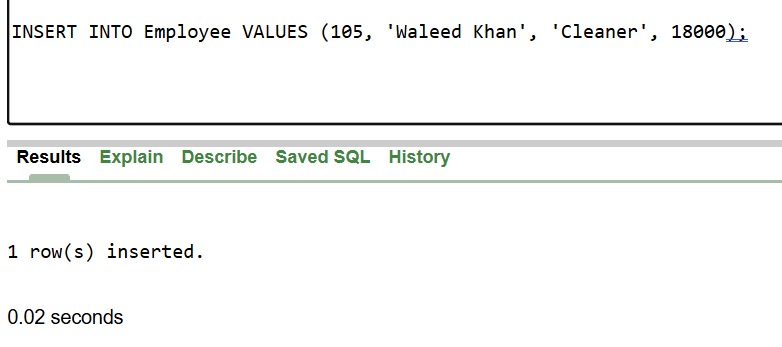
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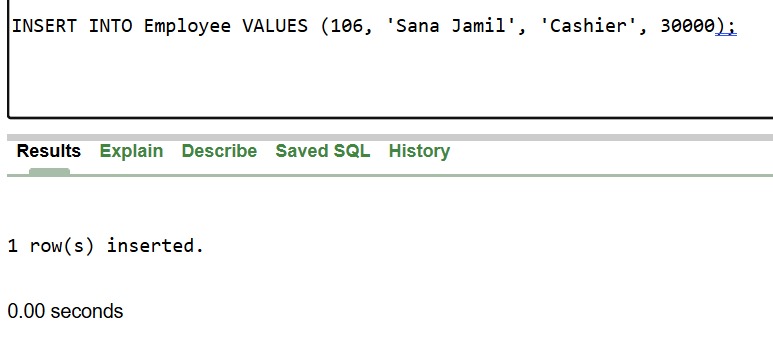
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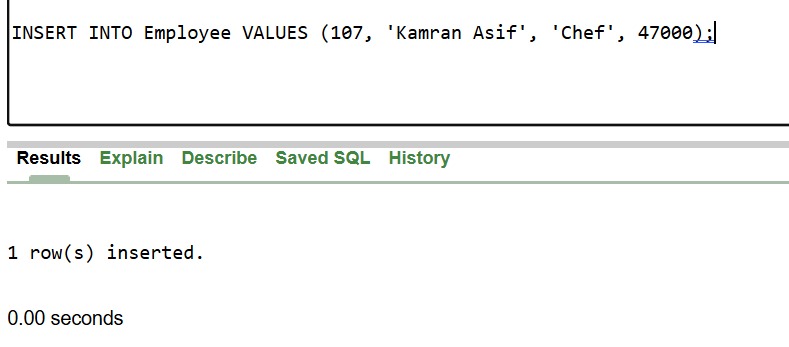
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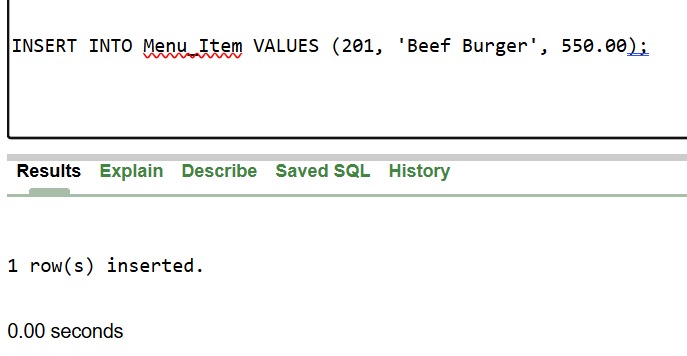
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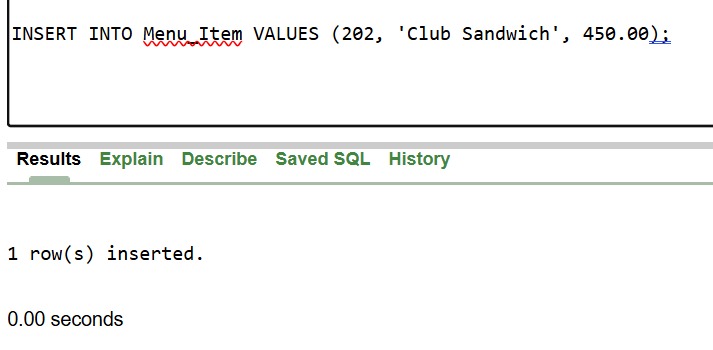
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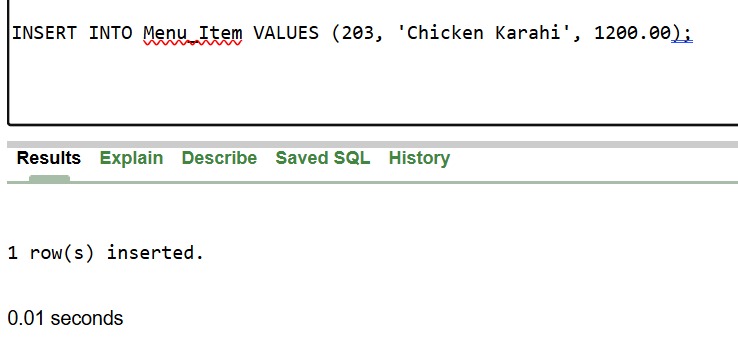
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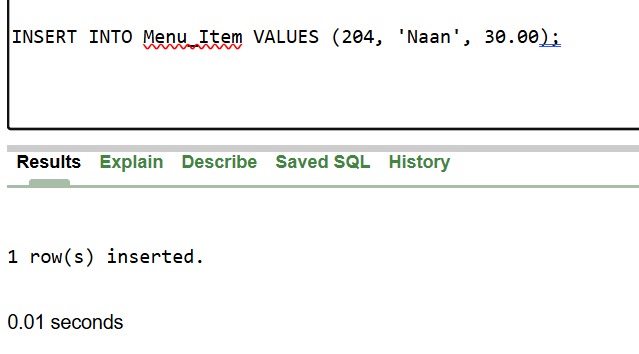
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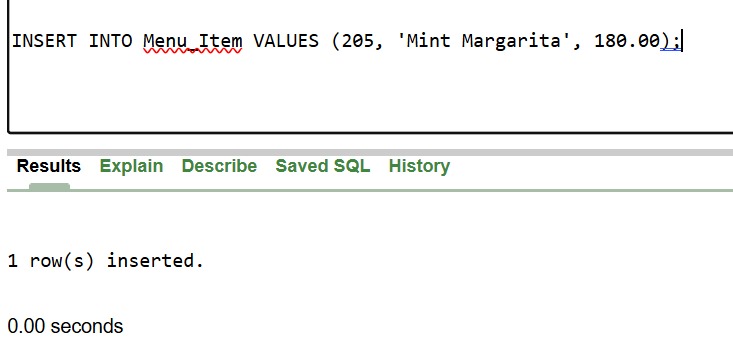
**Insert Record into Menu-item:**

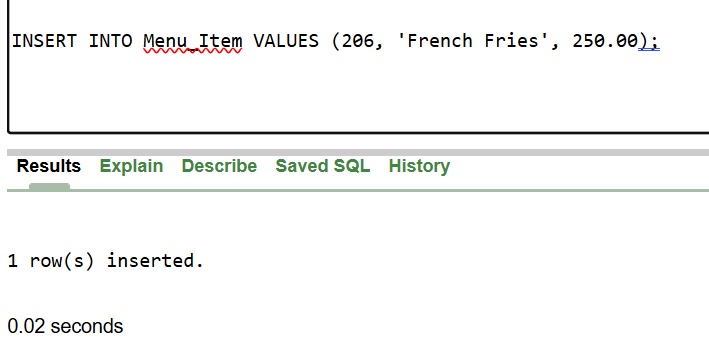
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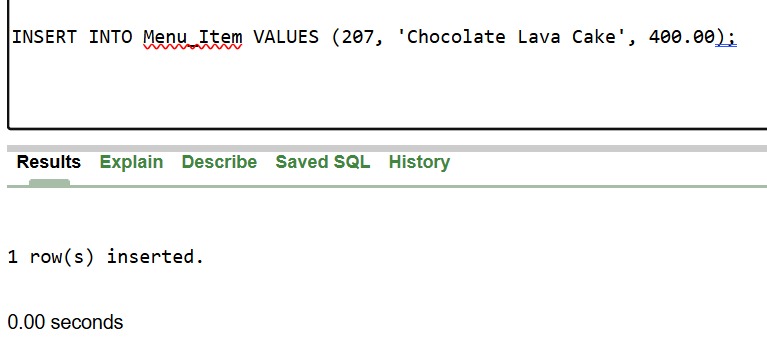
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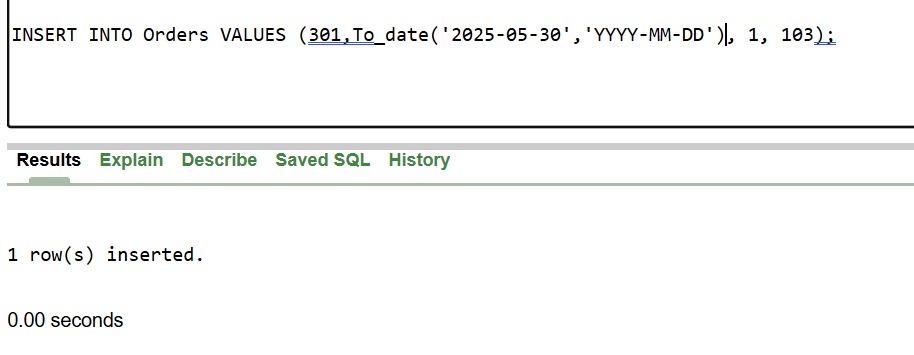
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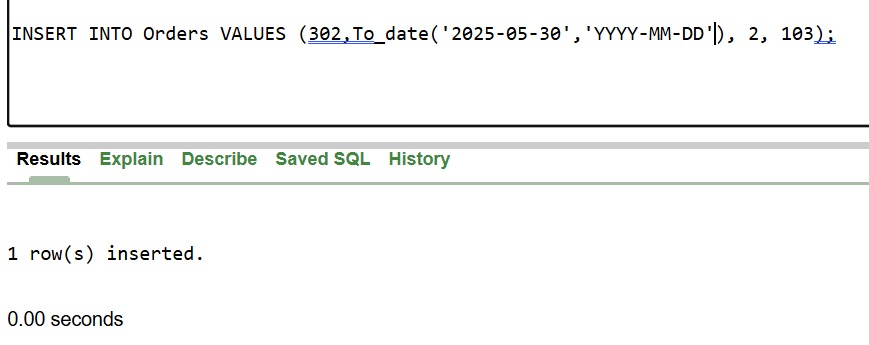
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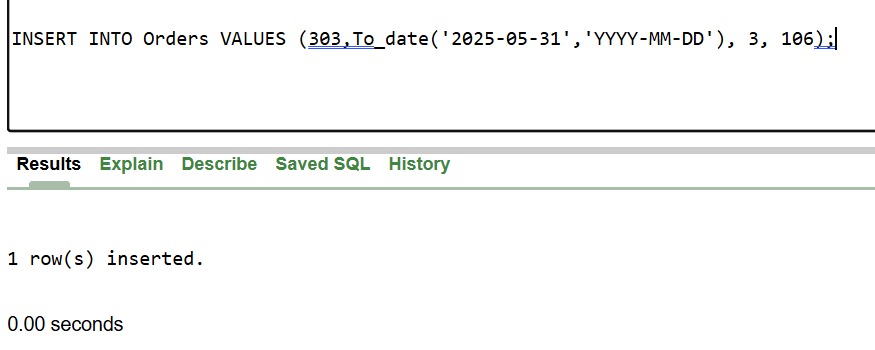
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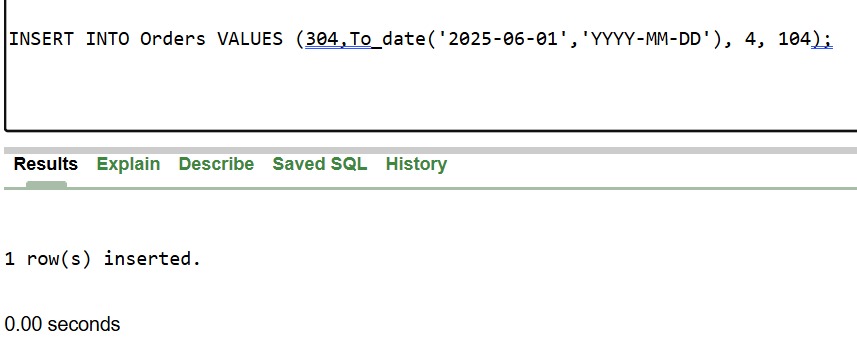
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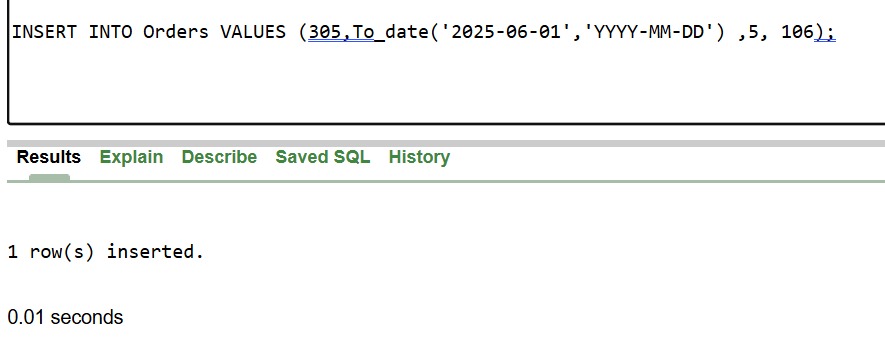
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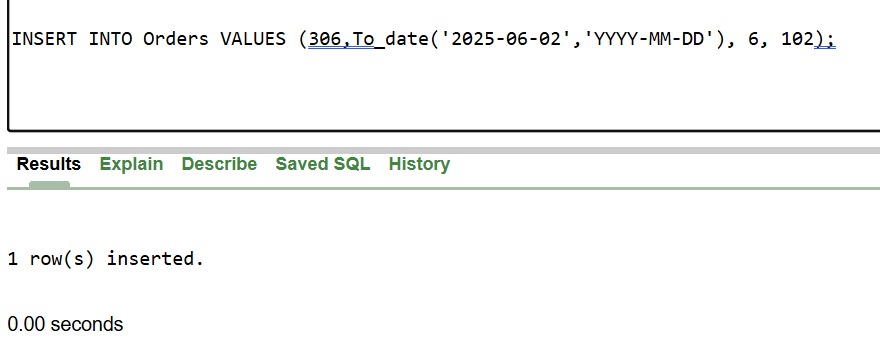
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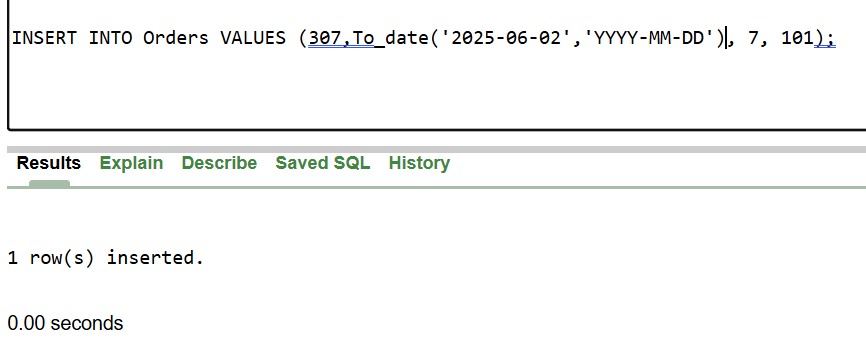
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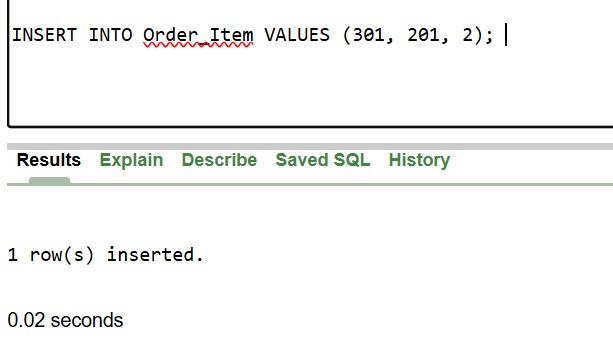
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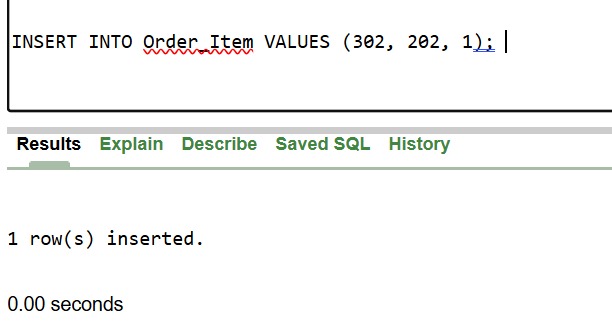
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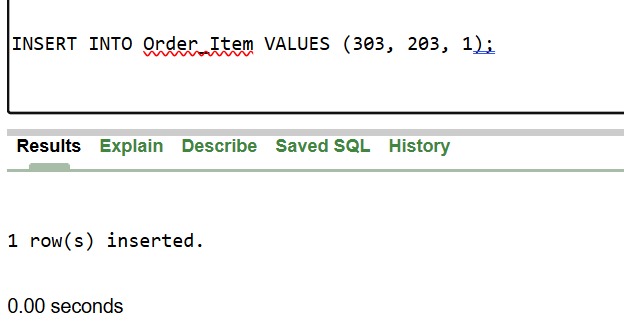
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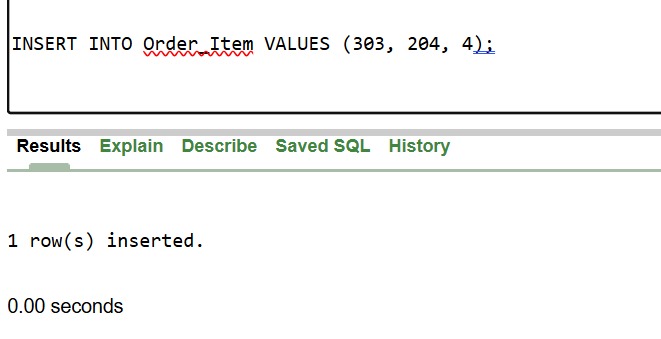
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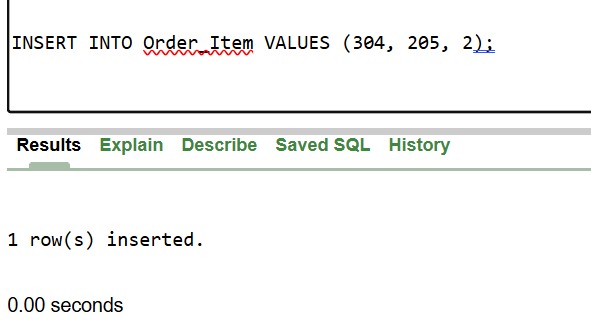
**Insert Record into Order-item:**

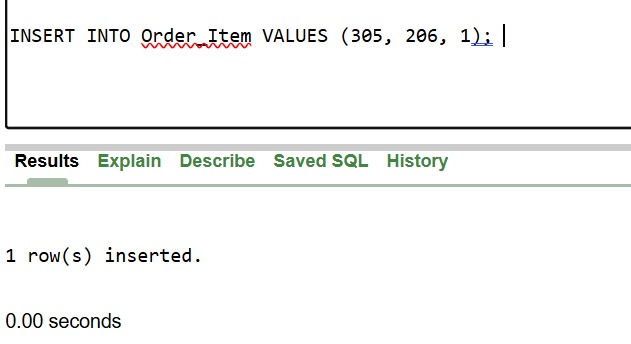
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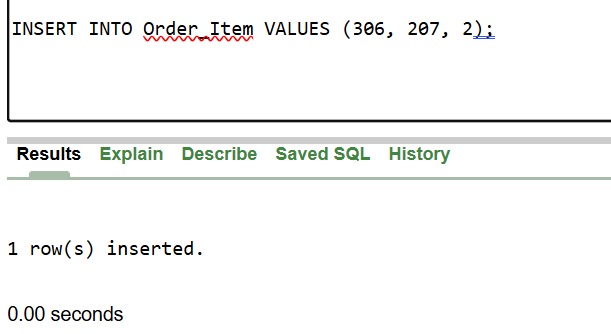
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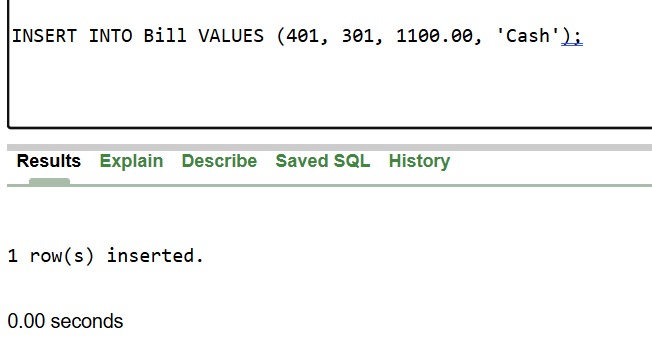
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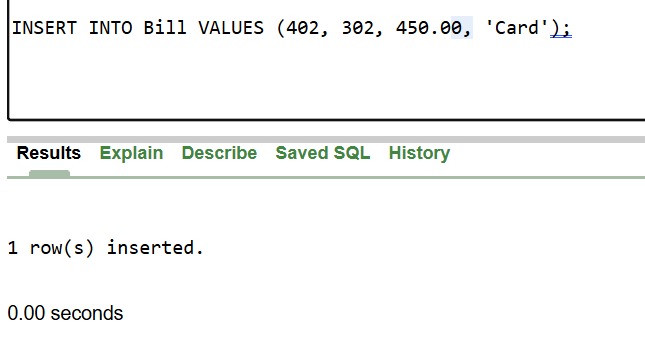
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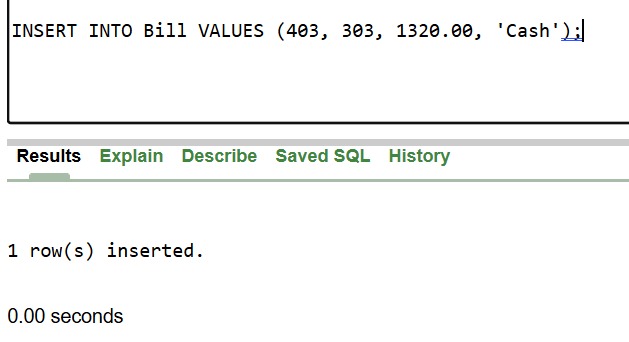
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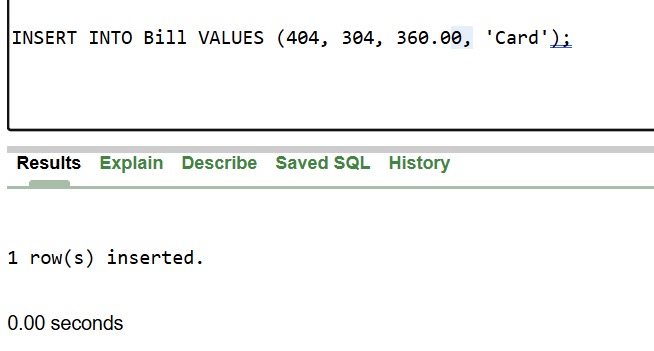
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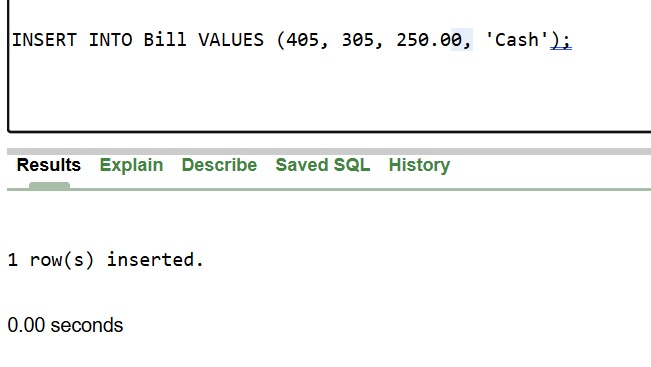
**Insert Record into Bill:**

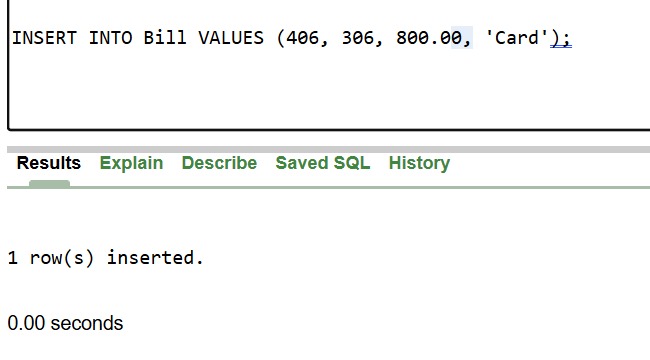
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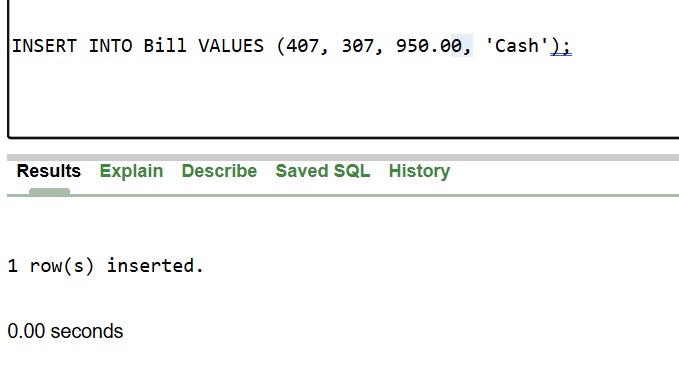
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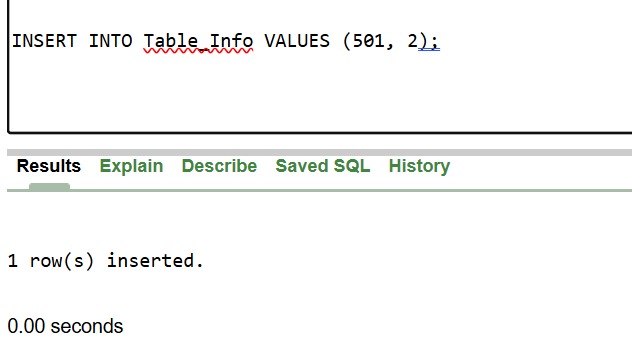
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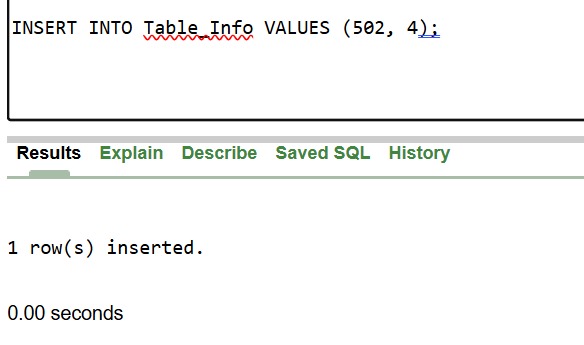
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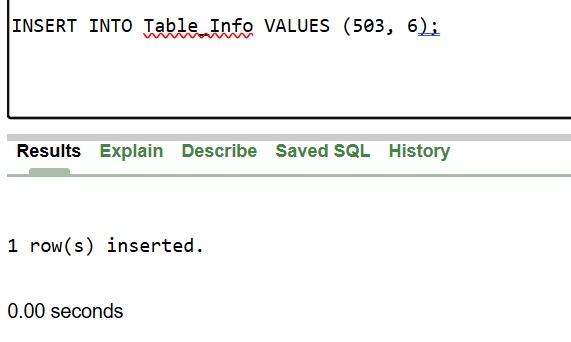
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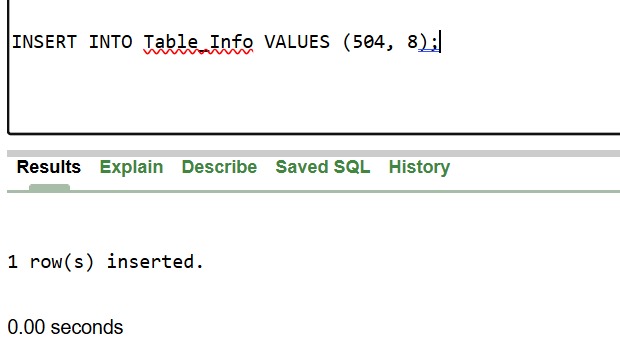
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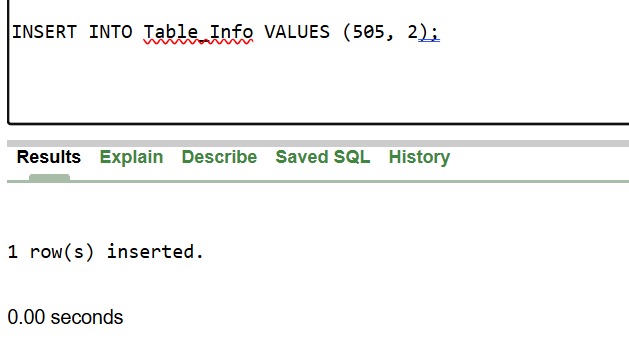
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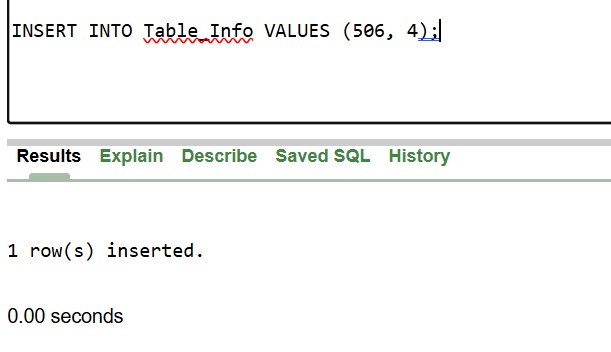
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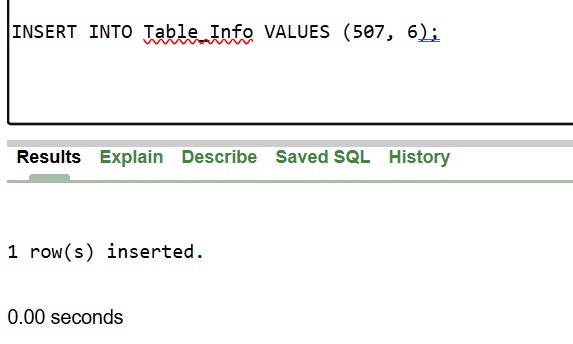
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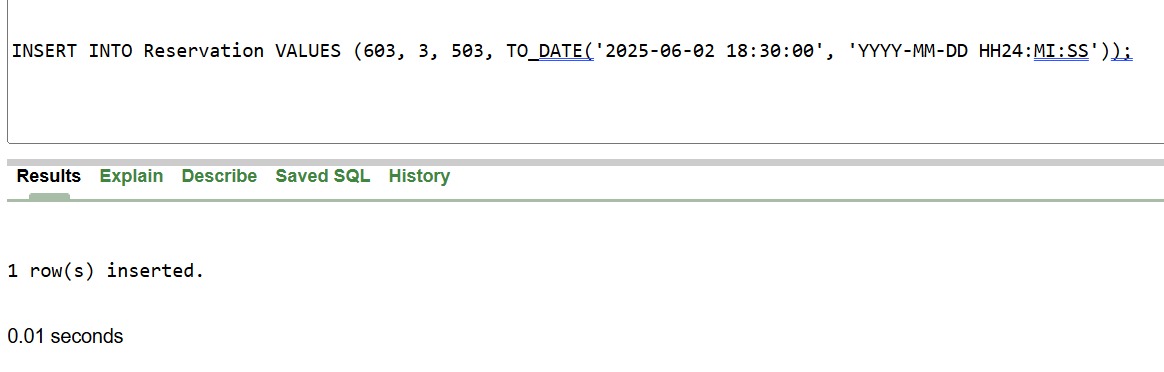
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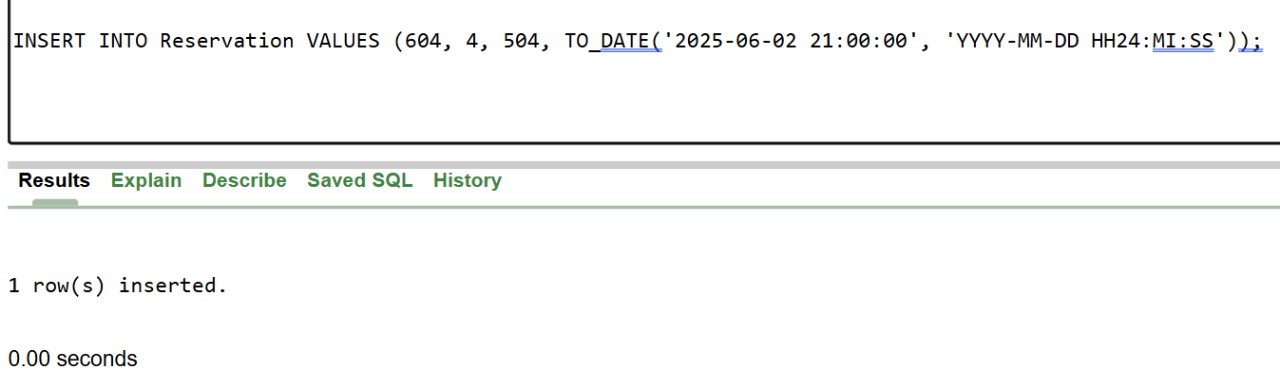
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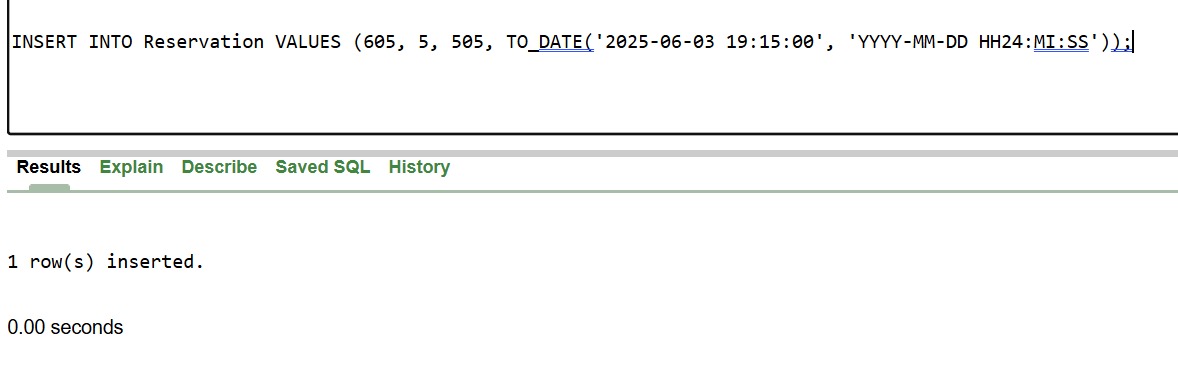
**Insert Record Into Reservation:**

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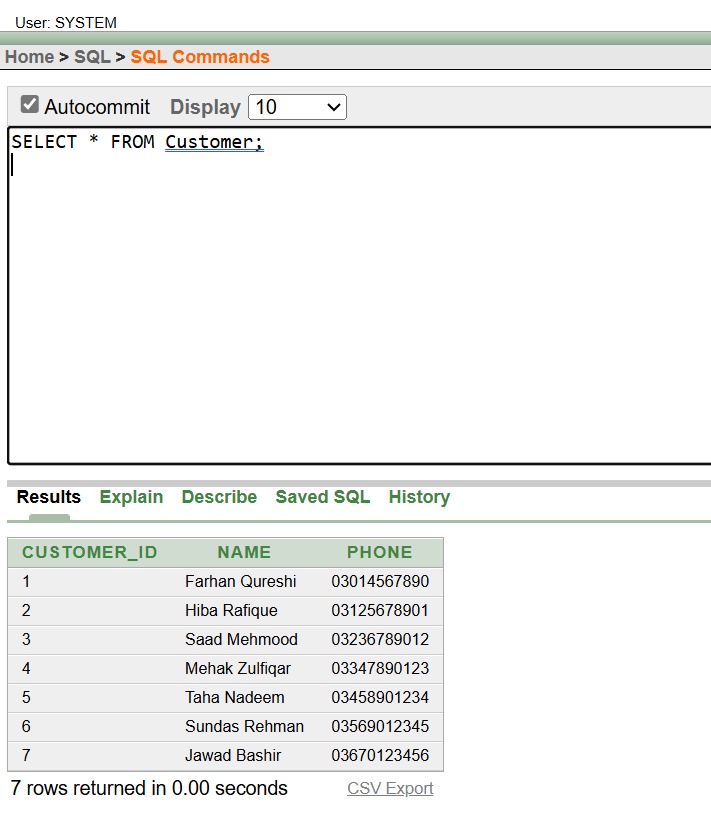
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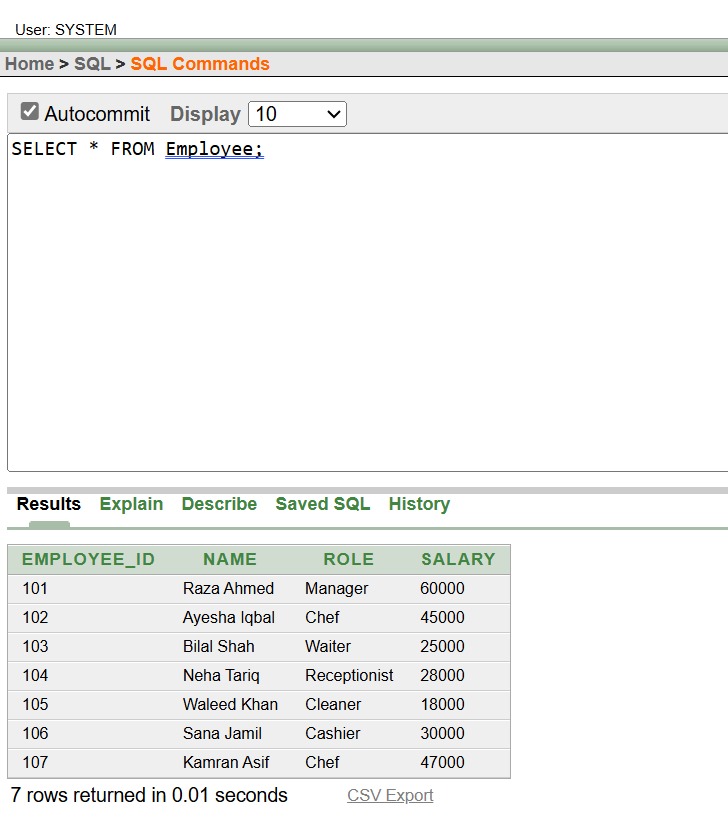
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## View Tables:

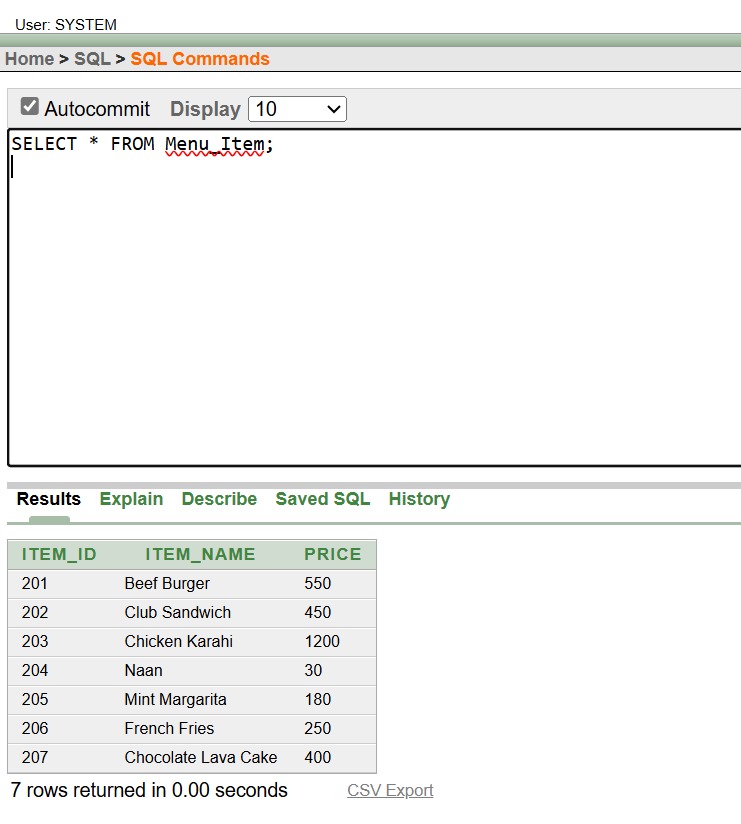
**Customer Table view:**

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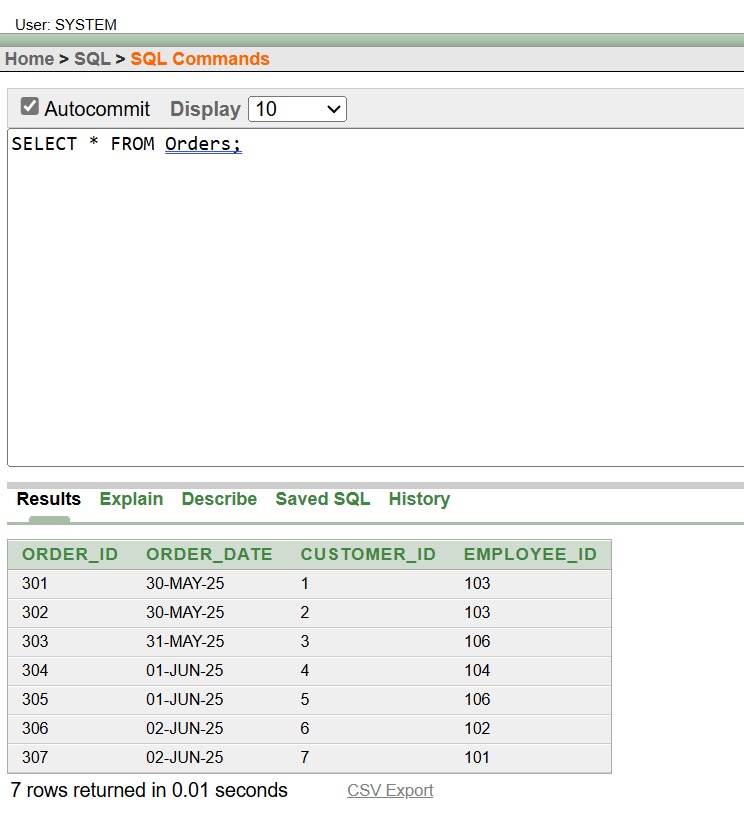
**Employee Table View:**



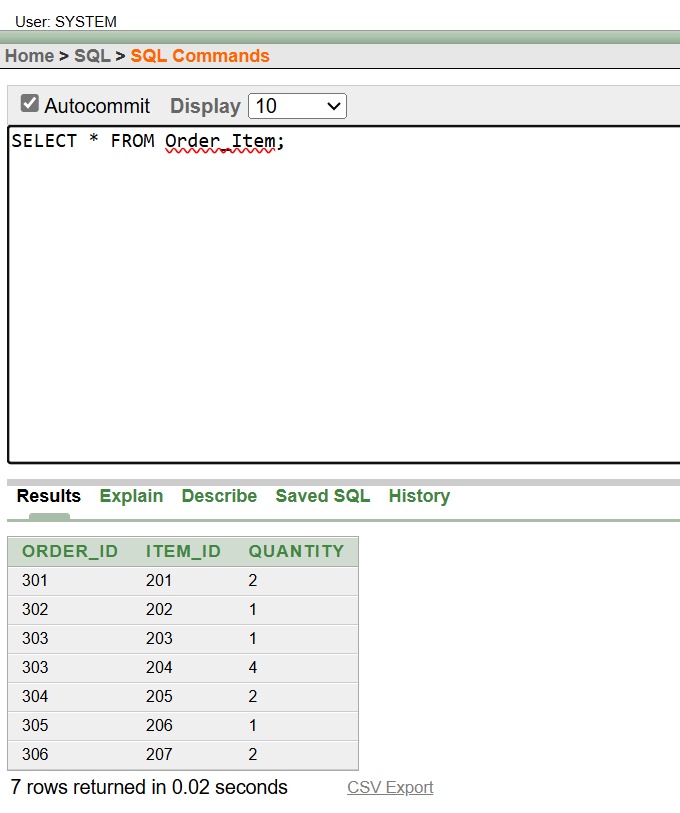
**Menu\_Item Table View:**



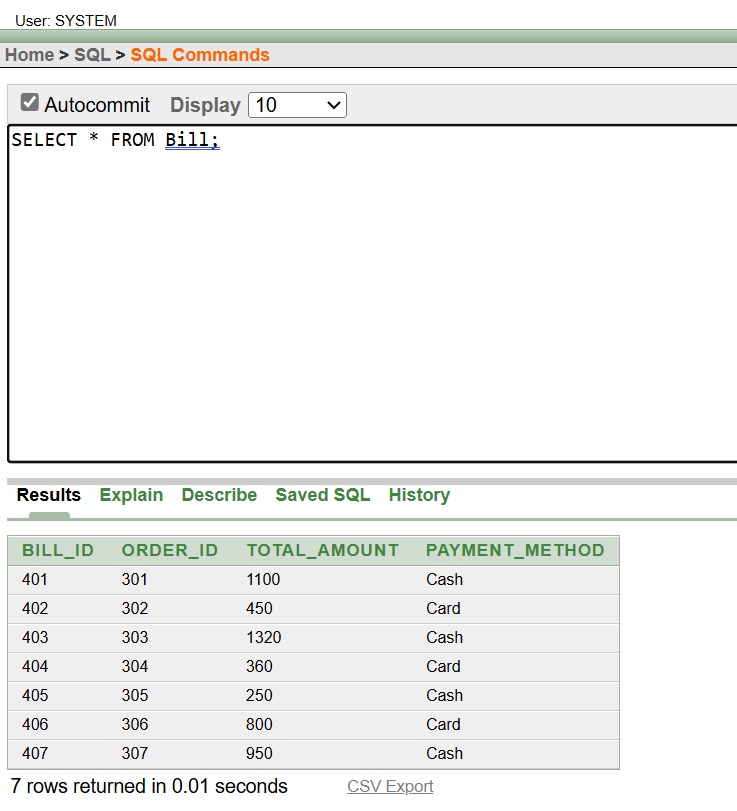
**Orders Table View:**



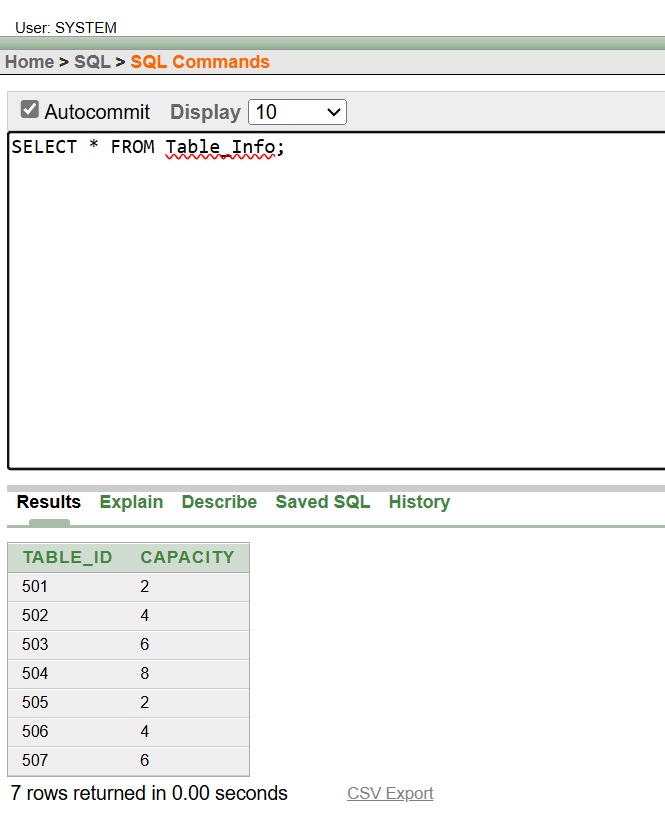
**Order\_Item Table View:**

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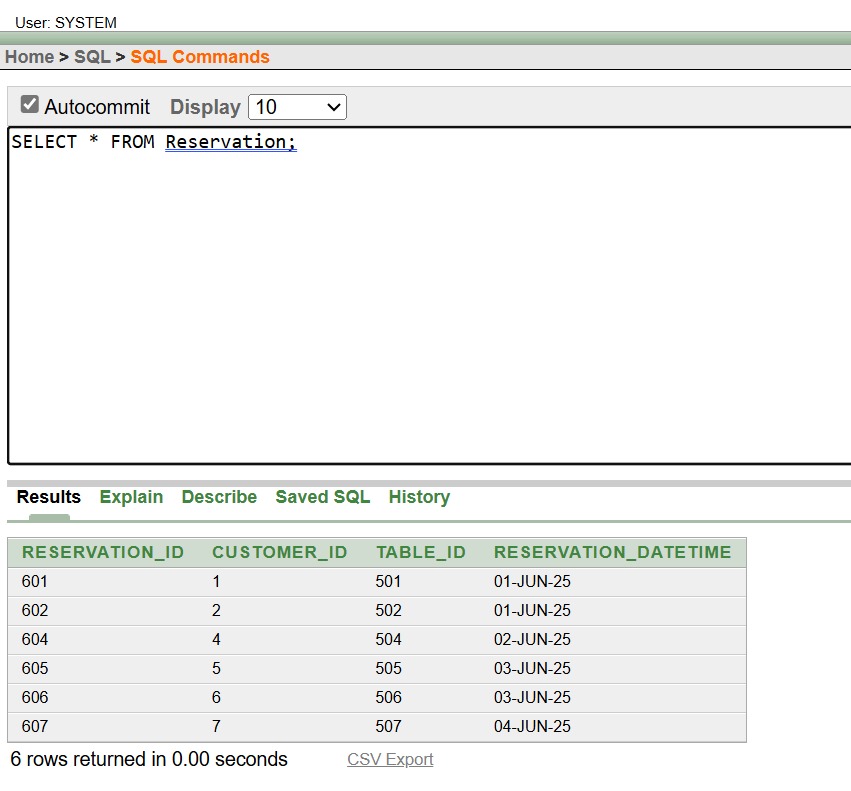
**Bill Table View:**

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**Table\_Info View:**

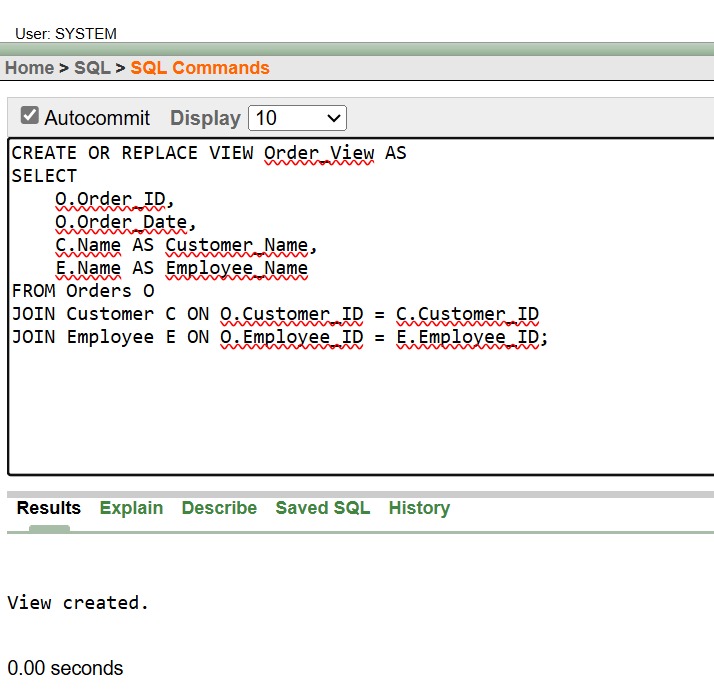
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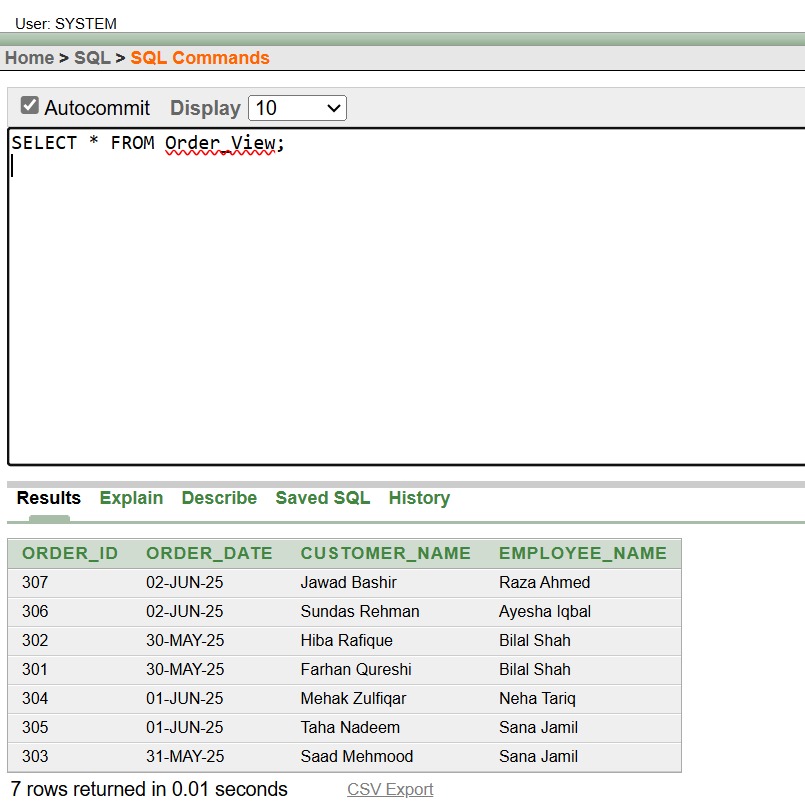
**Reservations Table View:**

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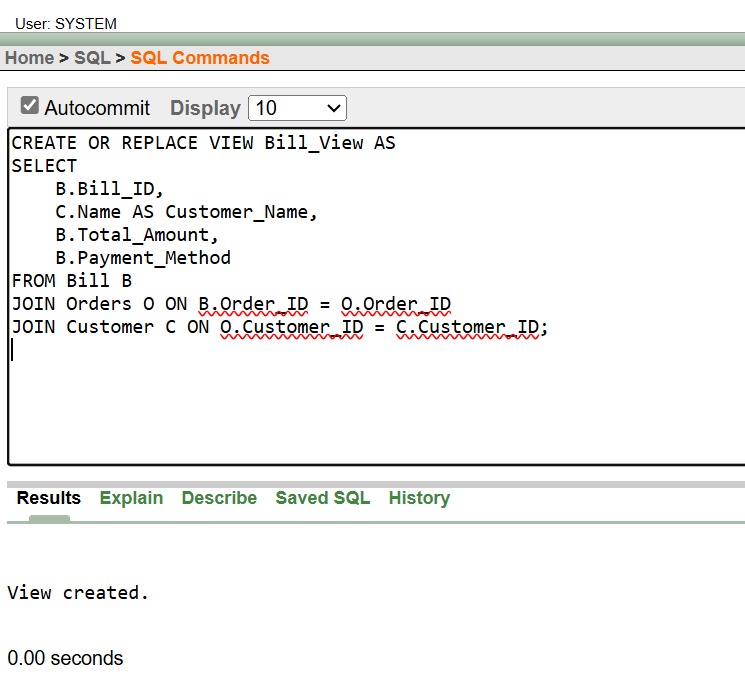
## Views:

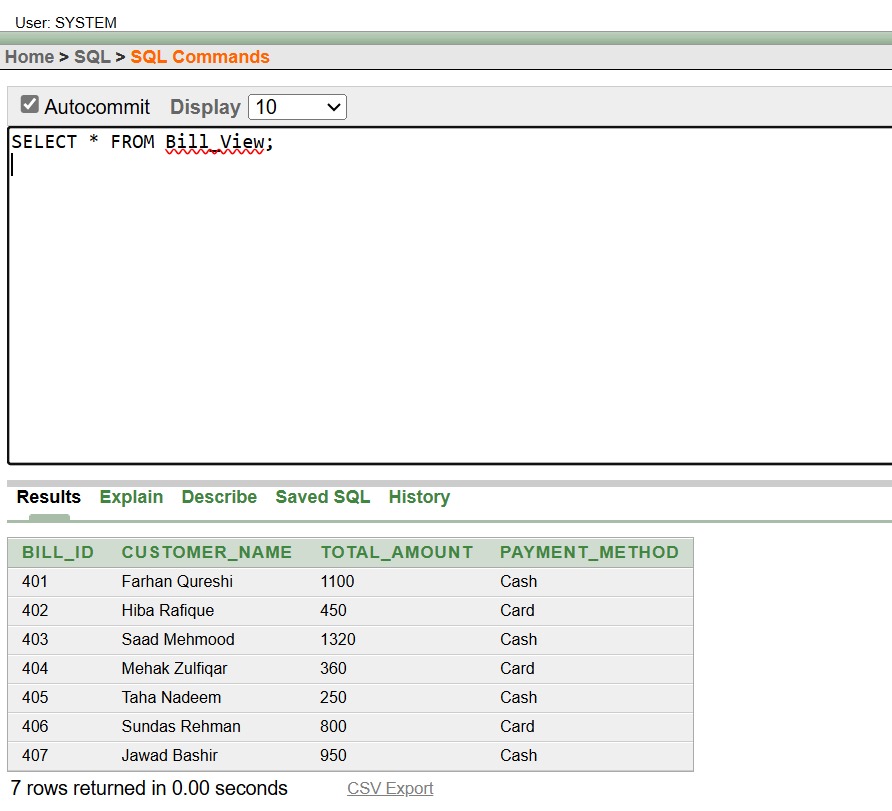
**Order view with Customer and Emloyee:**



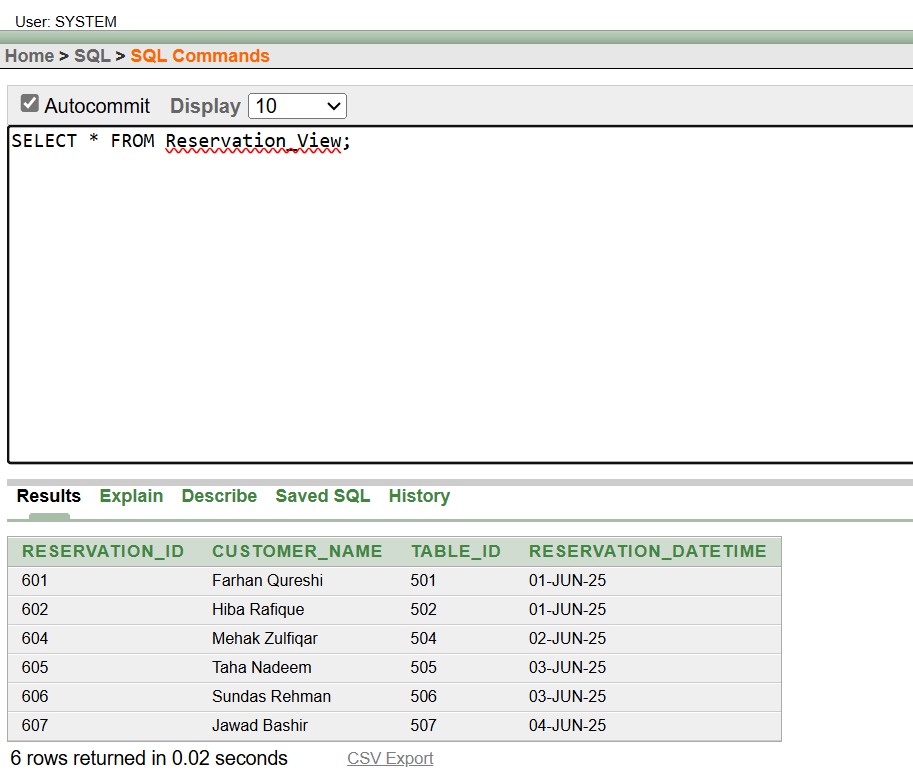
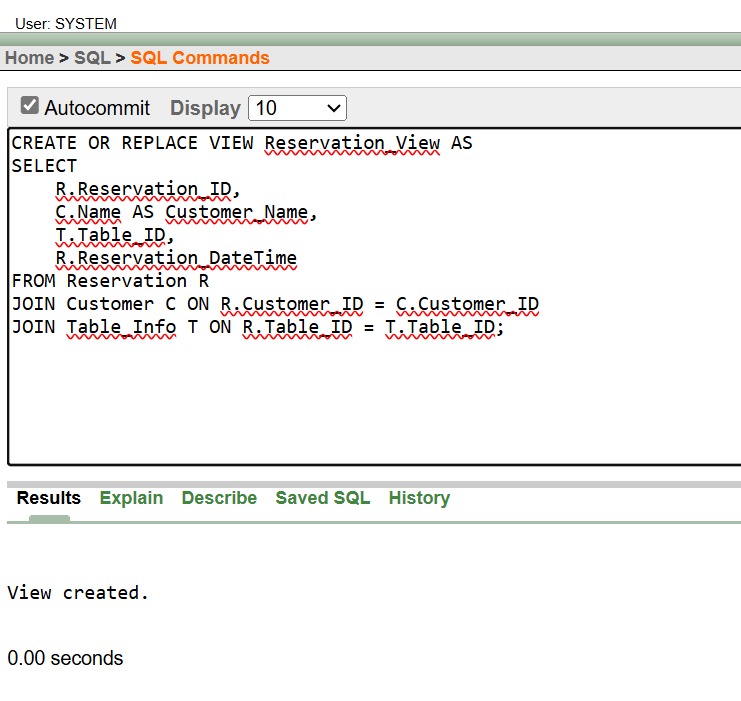


**Bill view with Customer and Order:**

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**Reservation view with Customer and Order:**

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