A close-up photograph of a wooden pencil lying diagonally across a sheet of paper. The paper contains handwritten mathematical calculations, including the numbers '100.', '50.', and '1000.' above a line graph. The background is blurred.

# Bill Calculating Machine

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(Python VITyarthi Project)

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# INTRODUCTION

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This project is a comprehensive shop billing application built with Python and Tkinter. It enables seamless retail management by integrating product billing, inventory tracking, and admin features into an intuitive graphical interface. Automated discounts are applied based on purchase totals, and loyal customers can benefit from additional savings through a membership system. Designed for simplicity and efficiency, this tool streamlines everyday billing and stock control for small and medium-sized shops.

# REQUIREMENT

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Python 3.0 (programming language)

Tkinter (Python's built-in GUI library, included with standard Python installation)

A computer with Windows, macOS, or Linux that supports Python and Tkinter

Basic knowledge of Python coding.

# PROJECT OVERVIEW

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This shop billing system is a Python desktop application with a user-friendly graphical interface created using Tkinter. It allows shopkeepers to efficiently manage product billing, inventory tracking, and administrative tasks. The system automates discounts based on purchase amounts and provides extra benefits for loyal customers through a membership feature. With integrated billing, inventory updates, admin controls, and easy discount handling, the application streamlines everyday operations for small and medium-sized retail shops.

# FEATURES

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**Product Billing:** Add items by code and quantity, with automatic calculation of totals.

**Inventory Management:** Tracks available stock for each product and updates inventory after sales.

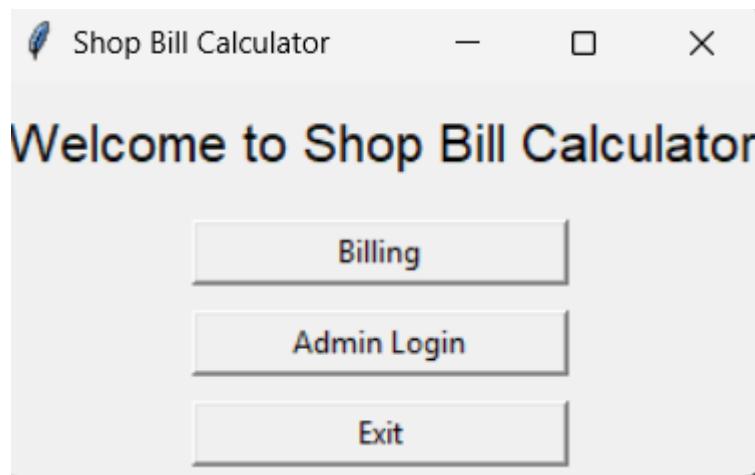
**Admin Panel:** Secure login allows admins to add new items, update stock, and view inventory.

**Automated Discounts:** Applies discounts based on total bill amount (tiered discount system).

**Membership Discount:** Offers an additional 10% discount for loyal customers with valid membership credentials (customer name + phone number).

# Output

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A screenshot of a Windows application window titled "Shop Bill Ca...". The window has standard minimize, maximize, and close buttons at the top. It displays a form with fields for "Item Code:" and "Quantity:", followed by two buttons: "Add Item" and "Generate Bill". At the bottom is a "Back" button.

Billing Page

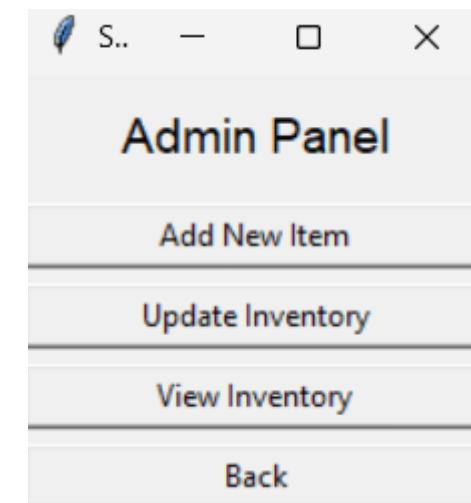
Item Code:

Quantity:

Add Item

Generate Bill

Back



# FUTURE PROSPECTS

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**Receipt Printing & Export:** Implement bill printing and exporting bills/inventory to PDF, Excel, or CSV formats.

**Barcode Scanning:** Integrate barcode scanner support for faster item entry and checkout.

**Member Management System:** Create a dedicated interface for registering, viewing, and managing customer memberships.

# CONCLUSION

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This project delivers a practical and user-friendly shop billing system with inventory tracking, admin management, and customer rewards. It streamlines billing operations for retail shops, making them more efficient and customer-centric, while providing a solid foundation for future enhancements and scalability.

# BIBLIOGRAPHY

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- Google
- Google Gemini
- GitHub

# THANK YOU

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