PROJECT REPORT

VIT BHOPAL UNIVERSITY

PROJECT NAME: BASIC PYTHON CALCULATOR

SUBMITTED BY:

SAAD ALAM SHAIKH

REG. NO.:

25BCE10850

1. Introduction

This project provides a simple calculator application using Python for basic arithmetic operations.

2. Problem Statement

Manual calculations can be slow and error-prone. A simple calculator program helps users compute results quickly.

3. Objectives

- Perform addition, subtraction, multiplication, and division
- Provide menu-driven user input
- Display accurate results
- Handle invalid input cases

4. Functional Requirements

MODULE NAME	DESCRIPTION
Arithmetic Operations	Carries out add, subtract, multiply, divide
Input Handling	Shows menu and takes numbers from user
Result Display and Error Handling	Shows output and manages errors

5. Non-Functional Requirements

Requirement	Description
Usability	Easy for beginners to operate
Reliability	Produces correct results every time
Error Handling	Manages incorrect choices or division by zero

Performance	Fast execution and quick response

6. Design Decisions

- Python chosen for simplicity
- Modular functions used for clarity
- Command-line interface for beginner-level usage

7. Challenges

Understanding modularity and condition checks

8. Learnings

User input handling, conditions, modular programming