**Project Title: Python Web Scraper**

**Objective:**

Create a Python-based web scraper using libraries such as BeautifulSoup and requests. The goal is to extract relevant data from websites and store it in a structured, analyzable format.

**Requirements:**

* Extract specific information (e.g., headlines, product details, URLs).
* Handle various HTML structures and tags.
* Ensure compatibility across different websites.
* Save extracted data in structured formats such as:
  + **CSV**
  + **JSON**

**Technologies:**

* Python
* BeautifulSoup
* requests
* CSV, JSON for data storage

**Deliverables:**

* Complete source code of the web scraper
* README or documentation explaining:
  + Setup and usage
  + How to modify target websites or HTML structures
* Example output files (.csv, .json)

**Optional Features:**

* User input to select which website or data to scrape
* Logging of errors or extraction summaries
* Scheduling or automation with cron or Python schedulers

**Project Title: Console/GUI-Based Calculator**

**Objective:**

Develop a Python calculator capable of performing basic arithmetic operations with error handling, optional GUI, and operation logging.

**Features & Structure:**

**1. User Interface:**

* **Console-based** interface
* (Optional) **GUI using Tkinter** with:
  + Buttons for digits and operations
  + Input/output fields

**2. Core Functionalities:**

* Basic arithmetic operations:
  + Addition
  + Subtraction
  + Multiplication
  + Division
* Input validation and error handling:
  + Handle non-numeric inputs
  + Prevent division by zero
* Support for both integers and decimals

**3. Reports & History (Optional):**

* Log all calculations performed
* Save history to:
  + Text files
  + SQLite database
* (Optional) Use pandas for structured history tracking and report generation

**Technologies:**

* Python
* Tkinter (optional GUI)
* SQLite (optional for history)
* Pandas (optional for reports)
* Logging module

**Deliverables:**

* Python script or executable
* Documentation with:
  + User guide
  + Setup instructions
  + Description of features
* (Optional) Database file or logs

**Checklist:**

✅ Arithmetic operations with error handling  
✅ Input support for integers/decimals  
✅ Optional Tkinter GUI  
✅ Optional SQLite/Pandas history  
✅ Logs or reports (optional)  
✅ Edge case testing (non-numeric, divide by zero, etc.)