AI in Education: Personalized Learning System

Objective:

To build an AI-based personalized learning recommendation system that suggests learning materials based on user performance and preferences.

Introduction:

Artificial Intelligence (AI) in education can enhance learning by providing personalized recommendations. This project simulates a system that suggests resources to students based on their test scores and preferred learning style.

Tools and Technologies Used:

- Python
- JSON
- Rule-based AI logic
- Console-based user interaction

Project Workflow:

1. User enters their latest quiz/test score.
2. User selects a preferred learning style (Video, Article, Quiz).
3. System evaluates the score and style.
4. Recommends learning resources accordingly.

Dataset/Resources:

A sample JSON file is used to simulate a database of categorized learning materials (videos, articles, quizzes) for beginner, intermediate, and advanced levels.

Sample Output:

Input: Score = 35, Style = Video

Output: Recommends 2 beginner-level YouTube videos on Python and AI basics.

Conclusion:

This project demonstrates how simple AI logic can enhance the learning process by providing relevant and personalized content to students. It can be further expanded using machine learning for smarter predictions.

Future Scope:

- Integrate ML models to dynamically predict learning needs.
- Add GUI (Tkinter) for user-friendly interface.
- Use a real-time database or learning management system.