# AI-Decision-Assistant

## Overview

\*\*AI-Decision-Assistant\*\* is a Python-based project that simulates AI-driven decision-making for commuting using propositional logic. The system evaluates various factors and logical conditions to assist users in making informed commuting decisions.

## Features

- \*\*Logical Sentence Evaluation\*\*: Utilize classes like `Symbol`, `Not`, `And`, `Or`, `Implication`, and `Biconditional` to build and evaluate complex logical sentences.

- \*\*Model Checking\*\*: Determine if a knowledge base entails a particular query using propositional logic.

- \*\*Extensible Structure\*\*: Easily add new logical constructs or extend existing ones to enhance decision-making capabilities.

- \*\*Example Usage\*\*: Demonstrates how to define symbols, knowledge bases, and perform model checking.

## Getting Started

### Prerequisites

- \*\*Python 3.x\*\*: Ensure you have Python installed on your machine. You can download it from [Python's official website](https://www.python.org/downloads/).

- \*\*Git\*\*: For version control and repository management. Download from [Git's official website](https://git-scm.com/downloads).

### Installation

1. \*\*Clone the Repository\*\*

Use Git to clone the repository to your local machine:

```bash

git clone https://github.com/your-username/AI-Decision-Assistant.git