AI MINI PROJECT

INPUT-

import tkinter as tk

from tkinter import messagebox

import datetime

def suggest\_flight\_schedule(origin, destination, date):

    flight\_schedules = [

        {"origin": "New York", "destination": "London", "departure\_time": "09:00", "arrival\_time": "14:00","date":"24-04-2024"},

        {"origin": "New York", "destination": "London", "departure\_time": "12:00", "arrival\_time": "17:00","date":"24-04-2024"},

        {"origin": "New York", "destination": "London", "departure\_time": "15:00", "arrival\_time": "20:00","date":"24-04-2024"},

        {"origin": "London", "destination": "New York", "departure\_time": "10:00", "arrival\_time": "15:00","date":"25-04-2024"},

        {"origin": "London", "destination": "New York", "departure\_time": "13:00", "arrival\_time": "18:00","date":"25-04-2024"},

        {"origin": "London", "destination": "New York", "departure\_time": "16:00", "arrival\_time": "21:00","date":"25-04-2024"},

        {"origin": "India", "destination": "Dubai", "departure\_time": "16:00", "arrival\_time": "21:00","date":"26-04-2024"},

        {"origin": "Dubai", "destination": "India", "departure\_time": "16:00", "arrival\_time": "21:00","date":"26-04-2024"},

        {"origin": "India", "destination": "North Korea", "departure\_time": "16:00", "arrival\_time": "21:00","date":"27-04-2024"},

        {"origin": "India", "destination": "Japan", "departure\_time": "16:00", "arrival\_time": "21:00","date":"27-04-2024"},

        {"origin": "Japan", "destination": "India", "departure\_time": "16:00", "arrival\_time": "21:00","date":"27-04-2024"},

        {"origin": "India", "destination": "USA", "departure\_time": "16:00", "arrival\_time": "21:00","date":"28-04-2024"},

        {"origin": "India", "destination": "USA", "departure\_time": "16:00", "arrival\_time": "21:00","date":"29-04-2024"},

        {"origin": "USA", "destination": "India", "departure\_time": "16:00", "arrival\_time": "21:00","date":"28-04-2024"},

    ]

    suggested\_schedules = []

    for schedule in flight\_schedules:

        if schedule["origin"] == origin and schedule["destination"] == destination and schedule["date"]  ==  date:

            suggested\_schedules.append(schedule)

    for schedule in suggested\_schedules:

        schedule["departure\_time"] = add\_delay(schedule["departure\_time"])

        schedule["arrival\_time"] = add\_delay(schedule["arrival\_time"])

    return suggested\_schedules

def add\_delay(time\_str):

    time = datetime.datetime.strptime(time\_str, "%H:%M")

    delayed\_time = time + datetime.timedelta(minutes=15)

    return delayed\_time.strftime("%H:%M")

def get\_flight\_schedules():

    origin = origin\_entry.get()

    destination = destination\_entry.get()

    date = date\_entry.get()

    # Call your expert system function to suggest flight schedules

    suggested\_schedules = suggest\_flight\_schedule(origin, destination, date)

    # Display the suggested schedules

    messagebox.showinfo("Suggested Flight Schedules", suggested\_schedules)

# Create main window

root = tk.Tk()

root.title("Airline Scheduling Expert System")

# Create labels and entry fields for user input

origin\_label = tk.Label(root, text="Origin:")

origin\_label.grid(row=0, column=0)

origin\_entry = tk.Entry(root)

origin\_entry.grid(row=0, column=1)

destination\_label = tk.Label(root, text="Destination:")

destination\_label.grid(row=1, column=0)

destination\_entry = tk.Entry(root)

destination\_entry.grid(row=1, column=1)

date\_label = tk.Label(root, text="Date:")

date\_label.grid(row=2, column=0)

date\_entry = tk.Entry(root)

date\_entry.grid(row=2, column=1)

submit\_button = tk.Button(root, text="Get Suggested Flight Schedules", command=get\_flight\_schedules)

submit\_button.grid(row=3, columnspan=2)

root.mainloop()

OUTPUT-



