LP2 (AI) Lab Exp No.6

class Flight:

def \_\_init\_\_(self, flight\_number, departure, destination, departure\_time, arrival\_time, capacity):

self.flight\_number = flight\_number

self.departure = departure

self.destination = destination

self.departure\_time = departure\_time

self.arrival\_time = arrival\_time

self.capacity = capacity

self.passengers = []

def add\_passenger(self, passenger):

if len(self.passengers) < self.capacity:

self.passengers.append(passenger)

print(f"Passenger {passenger.name} added to flight {self.flight\_number}.")

else:

print("Flight is full, cannot add more passengers.")

class Passenger:

def \_\_init\_\_(self, name, passport\_number):

self.name = name

self.passport\_number = passport\_number

class AirlineManagementSystem:

def \_\_init\_\_(self):

self.flights = []

def add\_flight(self, flight):

self.flights.append(flight)

def find\_flight(self, flight\_number):

for flight in self.flights:

if flight.flight\_number == flight\_number:

return flight

return None

# Function to get user input for flight details

def get\_flight\_details():

flight\_number = input("Enter flight number: ")

departure = input("Enter departure city: ")

destination = input("Enter destination city: ")

departure\_time = input("Enter departure time: ")

arrival\_time = input("Enter arrival time: ")

capacity = int(input("Enter capacity: "))

return Flight(flight\_number, departure, destination, departure\_time, arrival\_time, capacity)

# Function to get user input for passenger details

def get\_passenger\_details():

name = input("Enter passenger name: ")

passport\_number = input("Enter passport number: ")

return Passenger(name, passport\_number)

# Sample usage

if \_\_name\_\_ == "\_\_main\_\_":

airline\_system = AirlineManagementSystem()

num\_flights = int(input("Enter the number of flights: "))

for \_ in range(num\_flights):

flight = get\_flight\_details()

airline\_system.add\_flight(flight)

flight\_number = input("Enter flight number to add passenger: ")

flight = airline\_system.find\_flight(flight\_number)

if flight:

passenger = get\_passenger\_details()

flight.add\_passenger(passenger)

else:

print("Flight not found.")

Output :

