Deadline: 13 September 2023, 23:59

Submission:
  1. Create StudentID_Firstname_Wk4 folder, where StudentID is your KU ID and Firstname is your given name.
  2. Place files to submit: airline.py and wk4_summary.txt.
  3. In wk4_summary.txt, tell us what you have completed and what you have not. Submit in Google Classroom as well.
  4. Compress the folder and submit the compressed file in Google Classroom by the submission deadline (Your compressed file should be named under StudentID_Firstname_Wk4)

Grading Criteria:
  1. Correctness (75%): Your program must run and give the expected result. Make sure your function names are defined correctly.
  2. Cleanliness (25%): Your program must follow PEP8 convention; comments are added for others to understand your code easily.
 	
You can check out about PEP 8 convention here: *https://www.python.org/dev/peps/pep-0008/*

You are required to develop a program for an airline company. The program will prompt the user to select their desired destination from two regions: Asia and Europe. Europe comprises five destinations: England, Germany, Italy, France, and Belgium. Meanwhile, Asia encompasses China, Japan, Indonesia, India, and Singapore. Afterward, the program will inquire about the departure month; travel during November to January constitutes the high season, thus incurring a 20% increase in ticket prices.

The program will then seek input on the travel duration and the number of passengers. Opting for the business class entails a 50% increase in the ticket price. Additionally, we are currently running a promotion for hotel costs, pegged at 3000 baht per night per room, across all destinations.

Regarding the ticket pricing for each country, the computation is based on the distance in kilometers from Bangkok, as provided in the 'europe_distance' and 'asia_distance' lists. The travel cost is set at 10 baht per kilometer. For instance, the distance from Bangkok to Italy is 8705 kilometers, resulting in an economy class ticket price of 87050 baht outside of the high season."

Your program must contain the following functions:

Function name	Function inputs	Function output	Functionality
get_travel_info()	-	destination, month, period_stay	Calling this function prompts for destination, departure month, and stay duration. It checks for high season, notifying passengers of fee increase if needed. It then delivers three outputs.
get_passenger_info()	-	list of passengers and details (nested list)	When you call this function, it will request the number of passengers, and you should provide passenger details, including first name, last name, and class, which will be returned as a nested list.
check_high_season()	month	1 or 0	Calling this function requires inputting a month; if it falls within the high season, it yields 1; otherwise, it yields 0.
get_travel_fee()	country	travel_fee, region	When you use this function, it computes the travel cost by multiplying the kilometer with 10 for regular travel. It then provides two values: the travel cost and the region (Europe or Asia).
get_hotel_fee()	Number of passenger, period_stay	hotel_fee	When calling this function, you'll obtain the hotel cost, determined by the number of nights and rooms. The charge for a single room per night is set at 3000.

<u>Global list variable</u>

```
europe = ["England", "Germany", "Italy", "France", "Belgium"]
europe_distance = [9435, 8672, 8705, 9390, 9097]
asia = ["China", "Japan", "Indonesia", "India", "Singapore"]
asia_distance = [3442, 4312, 2333, 4213, 2108]
```

This list represents the distance between Bangkok and specific countries. For instance, Germany is situated 8672 kilometers away from Bangkok, while India is 4213 kilometers distant.

Sample Outputs (Shell Mode):

```
>>> get_travel_info()
What is your destination?: Italy
Departing Month?: March
How many days?: 4
('Italy', 'March', 4)

>>> get_travel_info()
What is your destination?: India
Departing Month?: December
During the peak travel season, ticket prices will increase by 20%.
How many days?: 3
('India', 'December', 3)

>>> get_passenger_info()
How many passenger?: 3
Please enter passenger#1 info
First Name: Mohamed
Last Name: Salah
Class: Economy
********
Please enter passenger#2 info
First Name: Steven
Last Name: Gerrard
Class: Business
********
Please enter passenger#3 info
First Name: Erling
Last Name: Haaland
Class: Business
********
[['Mohamed', 'Salah', 'Economy'], ['Steven', 'Gerrard',
'Business'], ['Erling', 'Haaland', 'Business']]
```

```
>>> get_passenger_info()
How many passenger?: 1
Please enter passenger#1 info
First Name: Withawat
Last Name: Tangtrongpairoj
Class: Economy
********
[['Withawat', 'Tangtrongpairoj', 'Economy']]

>>> check_high_season("December")
1

>>> check_high_season("January")
1

>>> check_high_season("March")
0

>>> get_travel_fee("Belgium")
(90970, 'Europe')

>>> get_travel_fee("Germany")
(86720, 'Europe')

>>> get_travel_fee("Singapore")
(21080, 'Asia')

>>> get_travel_fee("Japan")
(43120, 'Asia')

>>> get_hotel_fee(5,3)
45000

>>> get_hotel_fee(2,8)
48000
```

Sample Outputs for entire program:

```
What is your destination?: Italy
Departing Month?: November
During the peak travel season, ticket prices will increase by 20%.
How many days?: 3
How many passenger?: 2
Please enter passenger#1 info
First Name: Steven
Last Name: Gerrard
Class: Business
********
Please enter passenger#2 info
First Name: Xabi
Last Name: Alonso
Class: Economy
********
Passenger Name: Steven Gerrard
From Bangkok to Italy (Europe)
Traveling fee: 156690.00 Baht (Business)
********
Passenger Name: Xabi Alonso
From Bangkok to Italy (Europe)
Traveling fee: 104460.00 Baht (Economy)
********
Hotel fee for 2 rooms x 3 nights is 18000.00 Baht
The total cost is 279150.00 Baht
Enjoy your trip :)
```

```
What is your destination?: Singapore
Departing Month?: April
How many days?: 10
How many passenger?: 4
Please enter passenger#1 info
First Name: Chanathip
Last Name: Songrasin
Class: Business
********
Please enter passenger#2 info
First Name: Teerathon
Last Name: Bunmathan
Class: Economy
********
Please enter passenger#3 info
First Name: Sarach
Last Name: Yuyen
Class: Business
********
Please enter passenger#4 info
First Name: Teerathep
Last Name: Winothai
Class: Economy
********
Passenger Name: Chanathip Songrasin
From Bangkok to Singapore (Asia)
Traveling fee: 31620.00 Baht (Business)
********
Passenger Name: Teerathon Bunmathan
From Bangkok to Singapore (Asia)
Traveling fee: 21080.00 Baht (Economy)
********
Passenger Name: Sarach Yuyen
From Bangkok to Singapore (Asia)
Traveling fee: 31620.00 Baht (Business)
********
Passenger Name: Teerathep Winothai
From Bangkok to Singapore (Asia)
Traveling fee: 21080.00 Baht (Economy)
********
Hotel fee for 4 rooms x 10 nights is 120000.00 Baht
The total cost is 225400.00 Baht
Enjoy your trip :)
```