

Week 6 Assignment

Deadline: Sunday 8 October 2023, 23:59**Submission:**

1. Create StudentID_Firstname_Wk6 folder, where StudentID is your KU ID and Firstname is your given name.
2. Place files to submit: agency.py. (Do not forget to rename the given file: agency_posted.py)
3. Compress the folder and submit the compressed file in Google Classroom by the submission deadline (Your compressed file should be named under StudentID Firstname Wk6)
4. Submit a summary text file (filename: wk6_summary.txt). In this summary, tell us what you have completed and what you have not. Submit in Google Classroom as well.

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/>

Write the Python program that helps the travel agency to search and reserve flights.

The program starts with reading a choice from user (the travel agent). There are 7 choices that this program can do. Then, the program will perform according to the choice that the user selects.

Terminologies:

Flight	One-way air-travel trip
Origin	Starting point of a flight
Destination	End point of a flight
Direct flight	Non-stop flight from origin to destination.
Connecting flight	A combination of multiple direct flights from origin to destination. Normally, the connecting flight is used when the direct flight is not available. For example, when the direct flight from A to C is not available, to travel from A to C, the agent will use a connecting flight composed of 2 direct flights from A to B and from B to C. Note that B is called a connecting point here.
Connecting point	A stop between connecting flights.

Basic information:

In air travel, airport name generally is given based on the city where the airport is located. In addition, airport code is used to call airport name. Here are 11 airport names and codes used in this program.

Airport name	Airport code	Airport Name	Airport Code	Airport Name	Airport Code
Don Mueang	DMK	Chiang Mai	CNX	Chiang Rai	CEI
Phitsanulok	PHS	Khon Kaen	KKC	Udon Thani	UTH
Ubon Ratchathani	UBP	Phuket	HKT	Hat Yai	HDY
Surat Thani	URT	Krabi	KBV		

For simplicity, this work will mostly use airport codes to specify airports.

In the given program, airport codes are stored in a global list called AIRPORT_CODES. There is also a global dictionary called CITY_AIRPORT_CODES where keys are city names, and values are airport codes.

Here is the table for the prices (unit=Baht) of direct flights between two airports from one airline. If the price is shown as NA, this means that there is no direct flight between such two airports.

Price (Baht)	DMK	CNX	CEI	PHS	KKC	UTH	UBP	HKT	HDY	URT	KBV
DMK	NA	1630	1230	1040	1080	1260	1130	1650	1520	1150	990
CNX	1630	NA	NA	NA	1250	NA	NA	2180	1870	1620	1860
CEI	1230	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHS	1040	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
KKC	1080	1250	NA	NA	NA	NA	NA	1600	NA	NA	NA
UTH	1260	NA	NA	NA	NA	NA	NA	2620	NA	NA	NA
UBP	1130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HKT	1650	2180	NA	NA	1600	2620	NA	NA	2090	NA	NA
HDY	1520	1870	NA	NA	NA	NA	NA	2090	NA	NA	NA
URT	1150	1620	NA	NA	NA	NA	NA	NA	NA	NA	NA
KBV	990	1860	NA	NA	NA	NA	NA	NA	NA	NA	NA

In this program, there is a global nested dictionary called TICKET_PRICES that stores the ticket prices as shown in the table above. Note that the dictionary TICKET_PRICES only stores prices that are not NA.

Helpful note:

If _dict is nested (2D) dictionary, then _dict[x] is 1D dictionary, where x is key of first dimension.

You can consider _dict[x][y] is an individual value.

See example how to access and work with dictionary below.

Code	Output
<pre>_dict = {'A': {1:100, 2:200}, 'B': {3:300, 4:400, 5:500}} x = _dict['A'] print(x) print(dict['B'][4])</pre>	<pre>{1:100, 2:200} 400</pre>

Your program is supposed to perform with 8 following choices.

1. Find airport code from the given city name (See sample output on page 6)
2. Show all direct flights starting from the selected origin and under the budget. (See sample output on page 7)
3. Find flight from the selected origin and destination (See sample output on page 9)
4. Show all flights from the selected origin (See sample output on page 11)

(For choices 5-7, see sample output on pages 12-16)

5. Reserve ticket
6. Print the list of reserved tickets
7. Change status of the reserved ticket
0. Exit program

Booking-list data structure:

For choices 5-7, there is a data structure called booking list. Booking list is the list of dictionaries. You can visualize example of one booking list as follows.

0	1	2	...	5
'first name': 'Ann' 'last name': 'Smith' 'origin': 'DMK' 'destination': 'CNX' 'flight info': 'DMK-CNX: 1630.00 Baht' 'price': 1630 'status': 'Confirmed'	'first name': 'Bob' 'last name': 'Jones' 'origin': 'KBV' 'destination': 'CEI' 'flight info': 'KBV-DMK- CEI: 2220.00 Baht' 'price': 2220 'status': 'Canceled'	'first name': 'Charlie' 'last name': 'Brown' 'origin': 'PHS' 'destination': 'UBP' 'flight info': 'PHS-DMK- UBP: 2170.00 Baht' 'price': 2170 'status': 'Confirmed'	...	'first name': 'Frank' 'last name': 'Wilson' 'origin': 'HKT' 'destination': 'DMK' 'flight info': 'HKT-DMK: 1650.00 Baht' 'price': 1650 'status': 'Waiting'

- This example list has 6 dictionaries. Numbers 0-5 in the first row indicate list index. (List values at indexes 3,4 are intentionally left out due to limited space.)
- The second row shows list values. One list value = one dictionary that has 7 keys: first name, last name, origin, destination, flight info, price and status. If you notice here, working with one list value (e.g. `booking_list[0]`) is equivalent to working with one dictionary.
- There are 3 types of status: Confirmed, Canceled and Waiting. When the ticket is first reserved, the status is always set to Waiting. Then, the travel agent can change status to Confirmed or Canceled later.
- Assume there are no two customers with the same first name and last name.

Your program must contain the following functions:

Choice	Function name	Function inputs	Function output	Functionality
1	find_airport_code	None	None	Read city name from user and find airport code from the entered city continuously until user enters Done. For each entered city, report to user for the airport code of the entered city is found or not.
2	read_airport_code <i>Shell-mode output available on page 6</i>	Text telling user what to input	Airport code	<i>This function is intended to check validation of airport code</i> Use the text to tell user what to input. Read the airport code and check whether the code is valid or not. If the code is not valid, read again. Return the valid airport code.
2	get_flight_info_str <i>Shell-mode output available on page 6</i>	4 functions inputs. (1) boolean value: If flight is direct, this value is True. Otherwise, this is False, (2) origin airport code, (3) destination airport code, (4) price	Text containing flight information and flight	Use the 4 function inputs to create the string containing flight information and price Examples: >> <code>get_flight_info_str(True, 'DMK', 'HKT', 1650)</code> returns 'DMK-HKT: 1650.00 Baht' >> <code>get_flight_info_str(False, 'CEI', 'HKT', 2880)</code> returns 'CEI-DMK-HKT: 2880.00 Baht'

Choice	Function name	Function inputs	Function output	Functionality
2	find_direct_flights_under_budget	None	None	Read budget and origin airport from user. Display the available direct flights from origin to other airports with price below the given budget. If there is no available direct flight, report none.
3,4	find_direct_flight_price <i>Shell-mode output available on page 6</i>	origin airport code, destination airport code	Price of direct flight from origin to destination	If there exists direct flight from origin to destination, return the price of such direct flight. Otherwise, return zero. If origin and destination are the same, return zero.
3,4	find_connecting_flight_price <i>Shell-mode output available on page 6</i>	origin airport code, destination airport code	Price of connecting flight from origin to destination	Find and return price of connecting flight from origin to destination where the connecting point is ALWAYS DMK. <ul style="list-style-type: none"> • If origin and destination are the same, return zero. • If origin (or destination) is DMK, return price of direct flight between DMK and origin (or destination) • Price of connecting flight is the summation of two direct-flight prices: (1) from origin to DMK and (2) from DMK to destination <u>Examples:</u> >> Connecting flight price from KKC to HDY is 2600 Baht. It is composed of: (1) direct-flight price from KKC to DMK: 1080 Baht and (2) direct-flight price from DMK to HDY: 1520 Baht. Although CNX or HKT can be used as connecting point from KKC to HDY, DMK is always used as connecting point. >> Connecting flight price from URT to KBV is 2140 Baht. It is composed of: (1) direct-flight price from URT to DMK: 1150 Baht and (2) direct-flight price from DMK to KBV: 990 Baht. Although HKT can be used as connecting point, DMK is always used.
3	find_flight_price	None	None	Read origin and destination airport codes from user. Display direct flight information if available. Otherwise, display connecting flight information

Choice	Function name	Function inputs	Function output	Functionality
4	find_all_flights_from_origin	None	None	Read origin airport code from user. Display direct flights from origin to the available airports. For the remaining airports that direct flights are not available, display connecting flights.
5	find_available_flight_info <i>Shell-mode output available on page 6</i>	origin airport code, destination airport code	Flight information and flight price	Find price of available flight from origin to destination. The function also returns flight information. If origin and destination are the same, return empty string for flight info and zero for price.
5	reserve_ticket	booking_list	None	Read more about booking list data structure above (page 3). Read origin, destination, first name and last name from user. Add a new dictionary filled with corresponding keys and values to the existing booking list.
6	display_booking_list	booking_list	None	Display information of booking list
7	change_booking_status	booking_list	None	Read first name and last name from user. Then, ask user for changing ticket status, CF (for Confirmed) or CC (for Canceled). If user mistypes status, continue reading. Last, update the ticket dictionary with the specified status.
-	run_choice <i>This function is given. You can call this function to use it. Do not edit inside this function.</i>	choice and booking list	None	Call function that corresponds to the given choice.
-	read_choice	None	Valid choice	Show choices that the program can do, and read choice from user. If user enters invalid choice, notify user and continue reading until the valid choice. Return the choice.

Sample Outputs (Shell Mode):

```
>>> read_airport_code('Enter origin: ')
Enter origin: DMX
Enter origin: BMX
Enter origin: DMK
'DMK'
>>> get_flight_info_str(True, 'DMK', 'HKT', 1650)
'DMK-HKT: 1650.00 Baht'
>>> get_flight_info_str(False, 'CEI', 'HKT', 2880)
'CEI-DMK-HKT: 2880.00 Baht'
>>> find_direct_flight_price('DMK', 'CNX')
1630
>>> find_direct_flight_price('CEI', 'HKT')
0
>>> find_direct_flight_price('CNX', 'CNX')
0
>>> find_connecting_flight_price('CEI', 'HKT')
2880
>>> find_connecting_flight_price('DMK', 'CNX')
1630
>>> find_connecting_flight_price('CNX', 'DMK')
1630
>>> find_connecting_flight_price('CNX', 'CNX')
0
>>> find_available_flight_info('DMK', 'CNX')
('DMK-CNX: 1630.00 Baht', 1630)
>>> find_available_flight_info('CEI', 'HKT')
('CEI-DMK-HKT: 2880.00 Baht', 2880)
>>> find_available_flight_info('CNX', 'CNX')
('', 0)
```

Sample Outputs:

Sample Output for Choice 1

```
Choices
1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit
Enter your choice: 9
Your choice is invalid. Choose again.
```

```
Choices
1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit
Enter your choice: 99
Your choice is invalid. Choose again.
```

```
Choices
1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
```

6. Display booking list
7. Change booking status
0. Exit
Enter your choice: -1
Your choice is invalid. Choose again.

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit

Enter your choice: 11
Your choice is invalid. Choose again.

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit

Enter your choice: 1
Enter city or Done: Nonthaburi
Airport code of Nonthaburi is not available
Available airports:
Don Mueang / Chiang Mai / Chiang Rai / Phitsanulok /
Khon Kaen / Udon Thani / Ubon Ratchathani /
Phuket / Hat Yai / Surat Thani / Krabi
Enter city or Done: Chiang Mai
Airport code of Chiang Mai is CNX
Enter city or Done: Ubon Ratchathani
Airport code of Ubon Ratchathani is UBP
Enter city or Done: Krabi
Airport code of Krabi is KBV
Enter city or Done: Done

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit

Enter your choice: 1
Enter city or Done: Khon Kaen
Airport code of Khon Kaen is KKC
Enter city or Done: Done

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Change booking status
7. Display booking list
0. Exit

Enter your choice: 0

Sample Output for Choice 2

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit

Enter your choice: 2

Enter your budget: 1700

Enter origin airport code: CMX

Enter origin airport code: CNY

Enter origin airport code: CNX

Available direct flights from CNX:

CNX-DMK: 1630.00 Baht

CNX-KKC: 1250.00 Baht

CNX-URT: 1620.00 Baht

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit

Enter your choice: 2

Enter your budget: 2000

Enter origin airport code: HKT

Available direct flights from HKT:

HKT-DMK: 1650.00 Baht

HKT-KKC: 1600.00 Baht

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit

Enter your choice: 2

Enter your budget: 1000

Enter origin airport code: HDY

Available direct flights from HDY:

None

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit

Enter your choice: 2

Enter your budget: 2000

Enter origin airport code: DMK

Available direct flights from DMK:

DMK-CNX: 1630.00 Baht

DMK-CEI: 1230.00 Baht

DMK-PHS: 1040.00 Baht

DMK-KKC: 1080.00 Baht

DMK-UTH: 1260.00 Baht

DMK-UBP: 1130.00 Baht

DMK-HKT: 1650.00 Baht

DMK-HDY: 1520.00 Baht

DMK-URT: 1150.00 Baht

DMK-KBV: 990.00 Baht

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit

Enter your choice: 0

Sample Output for Choice 3

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit

Enter your choice: 3

Enter origin: BKK

Enter origin: BMX

Enter origin: DMX

Enter origin: DMK

Enter destination: KVB

Enter destination: KBV

Direct flight: DMK-KBV: 990.00 Baht

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit

Enter your choice: 3

Enter origin: HKT

Enter destination: HYD

Enter destination: HDY

Direct flight: HKT-HDY: 2090.00 Baht

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket

6. Display booking list
7. Change booking status
0. Exit
Enter your choice: 3
Enter origin: CEI
Enter destination: CEI
Origin and destination cannot be the same.

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit
Enter your choice: 3
Enter origin: KKC
Enter destination: HDY
No direct flight between KKC-HDY
Connecting flight: KKC-DMK-HDY: 2600.00 Baht

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit
Enter your choice: 3
Enter origin: UBP
Enter destination: URT
No direct flight between UBP-URT
Connecting flight: UBP-DMK-URT: 2280.00 Baht

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Change booking status
7. Display booking list
0. Exit
Enter your choice: 3
Enter origin: TRU
Enter origin: URT
Enter destination: KBV
No direct flight between URT-KBV
Connecting flight: URT-DMK-KBV: 2140.00 Baht

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit
Enter your choice: 0

Sample Output for Choice 4

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit

Enter your choice: 4

Enter origin: CEE

Enter origin: CEI

Direct flights:

CEI-DMK: 1230.00 Baht

Connecting flights:

CEI-DMK-CNX: 2860.00 Baht

CEI-DMK-PHS: 2270.00 Baht

CEI-DMK-KKC: 2310.00 Baht

CEI-DMK-UTH: 2490.00 Baht

CEI-DMK-UBP: 2360.00 Baht

CEI-DMK-HKT: 2880.00 Baht

CEI-DMK-HDY: 2750.00 Baht

CEI-DMK-URT: 2380.00 Baht

CEI-DMK-KBV: 2220.00 Baht

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit

Enter your choice: 4

Enter origin: CNX

Direct flights:

CNX-DMK: 1630.00 Baht

CNX-KKC: 1250.00 Baht

CNX-HKT: 2180.00 Baht

CNX-HDY: 1870.00 Baht

CNX-URT: 1620.00 Baht

CNX-KBV: 1860.00 Baht

Connecting flights:

CNX-DMK-CEI: 2860.00 Baht

CNX-DMK-PHS: 2670.00 Baht

CNX-DMK-UTH: 2890.00 Baht

CNX-DMK-UBP: 2760.00 Baht

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit

Enter your choice: 4

Enter origin: DMK
Direct flights:
DMK-CNX: 1630.00 Baht
DMK-CEI: 1230.00 Baht
DMK-PHS: 1040.00 Baht
DMK-KKC: 1080.00 Baht
DMK-UTH: 1260.00 Baht
DMK-UBP: 1130.00 Baht
DMK-HKT: 1650.00 Baht
DMK-HDY: 1520.00 Baht
DMK-URT: 1150.00 Baht
DMK-KBV: 990.00 Baht
Connecting flights:
None

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit

Enter your choice: 0

Sample Output1 for Choices 5-7

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit

Enter your choice: 5

Enter origin: DMX

Enter origin: DMK

Enter destination: CNY

Enter destination: CNX

Enter first name: Ann

Enter last name: Smith

Ann Smith: DMK-CNX: 1630.00 Baht, Status: Waiting

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit

Enter your choice: 6

Ann Smith: DMK-CNX: 1630.00 Baht, Status: Waiting

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price

4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit
Enter your choice: 5
Enter origin: HKT
Enter destination: HKT
Origin and destination cannot be the same. Try again.

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit

Enter your choice: 5
Enter origin: HKT
Enter destination: DMK
Enter first name: Bob
Enter last name: Jones
Bob Jones: HKT-DMK: 1650.00 Baht, Status: Waiting

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit

Enter your choice: 6
Ann Smith: DMK-CNX: 1630.00 Baht, Status: Waiting
Bob Jones: HKT-DMK: 1650.00 Baht, Status: Waiting

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit

Enter your choice: 7
Enter first name: Bob
Enter last name: Jones
Do you want to confirm or cancel booking (CF/CC)? cc
Do you want to confirm or cancel booking (CF/CC)? CR
Do you want to confirm or cancel booking (CF/CC)? CC
Bob Jones: HKT-DMK: 1650.00 Baht, Status: Canceled

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit

Enter your choice: 6

Ann Smith: DMK-CNX: 1630.00 Baht, Status: Waiting
Bob Jones: HKT-DMK: 1650.00 Baht, Status: Canceled

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit

Enter your choice: 7

Enter first name: Abby

Enter last name: Smith

Do you want to confirm or cancel booking (CF/CC)? FF

Do you want to confirm or cancel booking (CF/CC)? cf

Do you want to confirm or cancel booking (CF/CC)? CF

Invalid first name or last name. Please try again.

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit

Enter your choice: 5

Enter origin: CEI

Enter destination: KBV

Enter first name: Charlie

Enter last name: Williams

Charlie Williams: CEI-DMK-KBV: 2220.00 Baht, Status: Waiting

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit

Enter your choice: 6

Ann Smith: DMK-CNX: 1630.00 Baht, Status: Waiting

Bob Jones: HKT-DMK: 1650.00 Baht, Status: Canceled

Charlie Williams: CEI-DMK-KBV: 2220.00 Baht, Status: Waiting

Choices

1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit

Enter your choice: 7

Enter first name: Ann

Enter last name: Smith

Do you want to confirm or cancel booking (CF/CC)? CF

Ann Smith: DMK-CNX: 1630.00 Baht, Status: Confirmed

Choices

```
1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit
Enter your choice: 6
Ann Smith: DMK-CNX: 1630.00 Baht, Status: Confirmed
Bob Jones: HKT-DMK: 1650.00 Baht, Status: Canceled
Charlie Williams: CEI-DMK-KBV: 2220.00 Baht, Status: Waiting
```

Choices

```
1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit
```

```
Enter your choice: 5
Enter origin: PHS
Enter destination: UBP
Enter first name: David
Enter last name: Martinez
David Martinez: PHS-DMK-UBP: 2170.00 Baht, Status: Waiting
```

Choices

```
1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit
```

```
Enter your choice: 7
Enter first name: Charlie
Enter last name: Williams
Do you want to confirm or cancel booking (CF/CC)? CF
Charlie Williams: CEI-DMK-KBV: 2220.00 Baht, Status: Confirmed
```

Choices

```
1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
7. Change booking status
0. Exit
```

```
Enter your choice: 6
Ann Smith: DMK-CNX: 1630.00 Baht, Status: Confirmed
Bob Jones: HKT-DMK: 1650.00 Baht, Status: Canceled
Charlie Williams: CEI-DMK-KBV: 2220.00 Baht, Status: Confirmed
David Martinez: PHS-DMK-UBP: 2170.00 Baht, Status: Waiting
```

Choices

```
1. Find airport code
2. Find direct flights under budget
3. Find price
4. Find all flights from origin
5. Reserve ticket
6. Display booking list
```

7. Change booking status
0. Exit
Enter your choice: 0

Additional choices to practice on your own (Do not submit these additional choices):

- Create list of customers' first names and last names
- Find out how much the confirmed tickets cost in total
- Remove canceled tickets out of the booking list