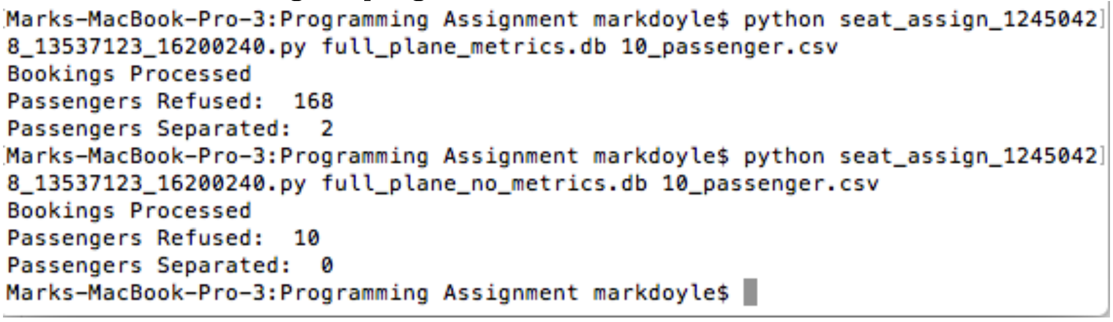
Supplementary Testing Document

Testing the booking function.

The booking function allocates seats and updates the refused and separated metrics. To test this we created two versions of a database representing a full plane. One of these had the passengers refused and passengers separated metrics full and the other had these metrics empty.

Screenshot of running the program on the two databases



```
Marks-MacBook-Pro-3:Programming Assignment markdoyle$ python seat_assign_1245042
8_13537123_16200240.py full_plane_metrics.db 10_passenger.csv
Bookings Processed
Passengers Refused:  168
Passengers Separated:  2
Marks-MacBook-Pro-3:Programming Assignment markdoyle$ python seat_assign_1245042
8_13537123_16200240.py full_plane_no_metrics.db 10_passenger.csv
Bookings Processed
Passengers Refused:  10
Passengers Separated:  0
Marks-MacBook-Pro-3:Programming Assignment markdoyle$ 
```

Screenshots of the updated databases

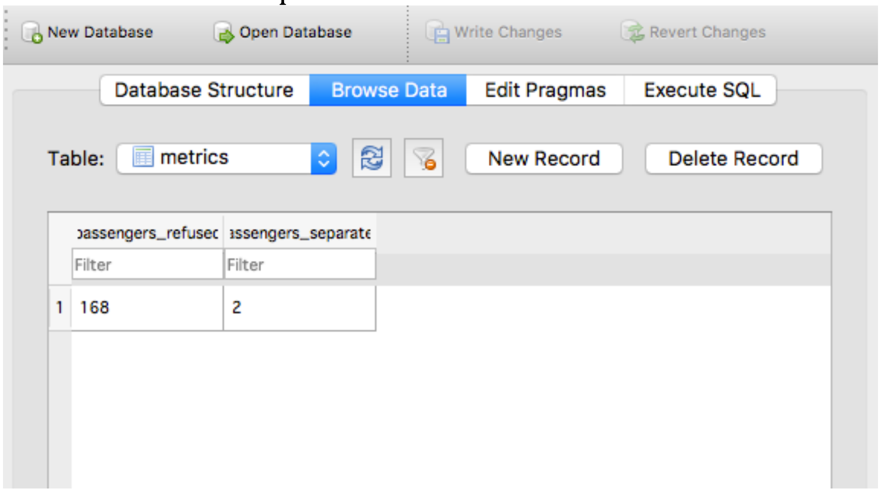


Table: metrics

	assengers_refusec	ssengers_separate
	Filter	Filter
1	168	2

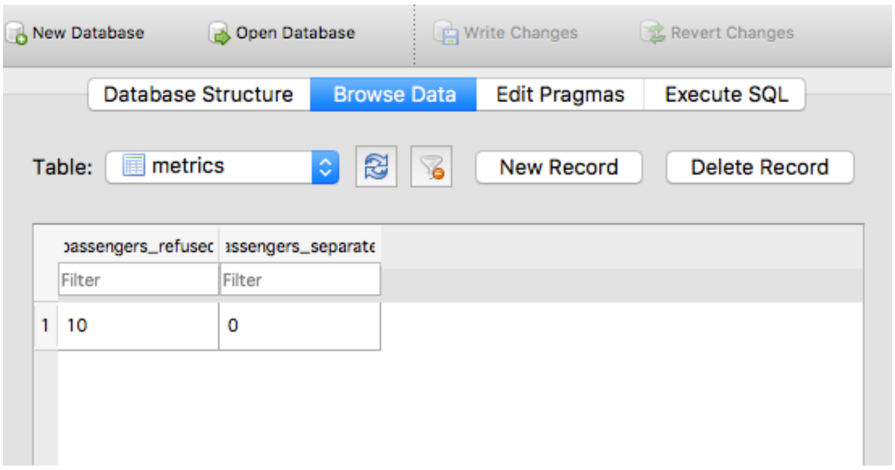
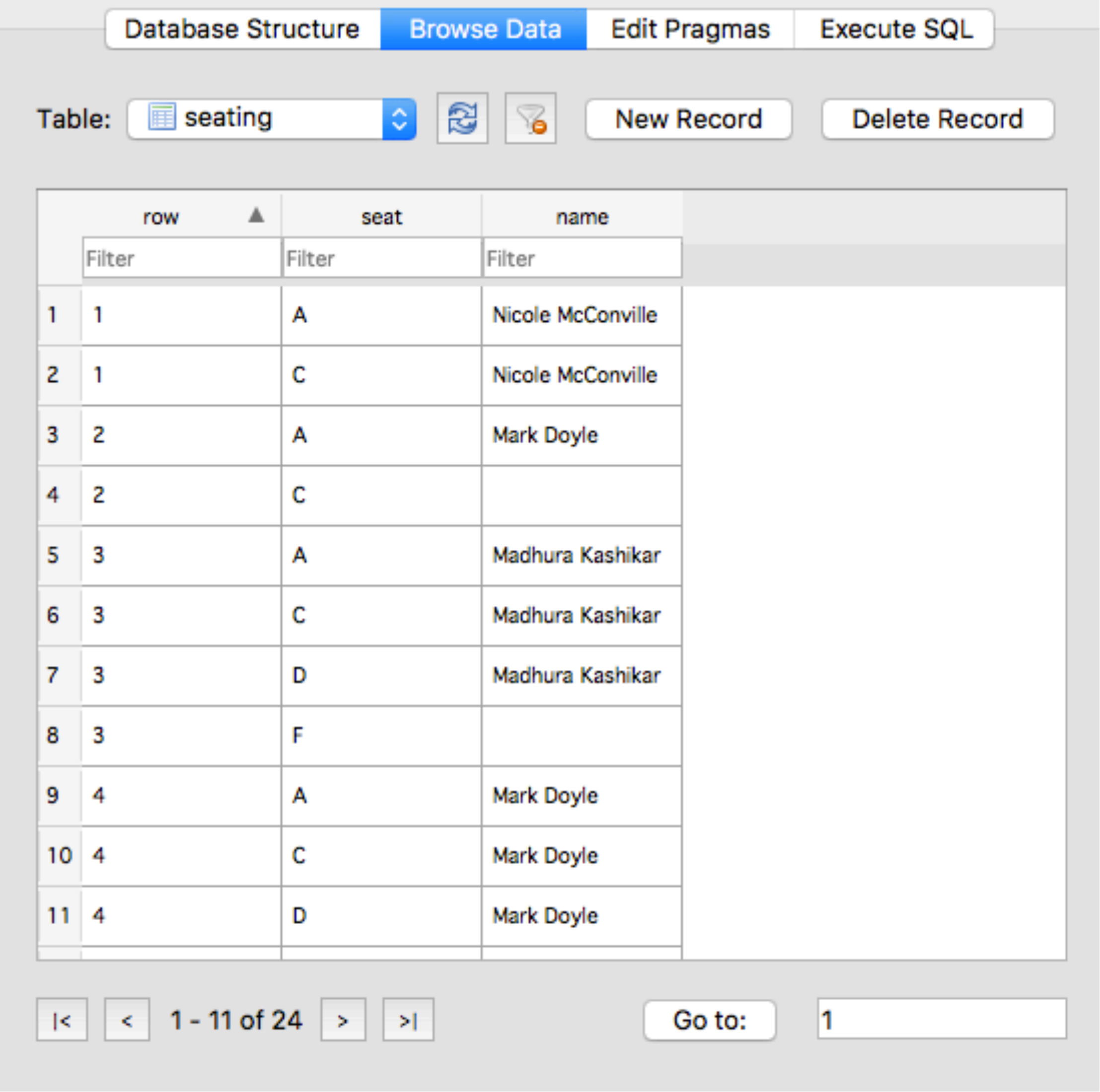


Table: metrics

	assengers_refusec	ssengers_separate
	Filter	Filter
1	10	0

The program is tested with on both a uniform plane layout where all rows have 4 seats and a layout where there are rows with 2 seats and others with 4.

Below is the resulting database with the program run on a plane with rows of both 2 and 4.



	row	seat	name
1	1	A	Nicole McConville
2	1	C	Nicole McConville
3	2	A	Mark Doyle
4	2	C	
5	3	A	Madhura Kashikar
6	3	C	Madhura Kashikar
7	3	D	Madhura Kashikar
8	3	F	
9	4	A	Mark Doyle
10	4	C	Mark Doyle
11	4	D	Mark Doyle

It can be seen from the screenshot above the program found the booking of 2 and assigned it to the row with two seats minimizing separation.

The rest of the functions are unit tested appropriately and can be found in a file entitled testing.py