> length(flights)

[1] 15

**数据一共有15个变量**

> count(flights)

n

1 89312

**一共有89312个数据**

> dim(flights)

[1] 89312 15

> flights$`Month,In\_Out,Australian\_City,International\_City,Airline,Route,Port\_Country,Port\_Region,Service\_Country,Service\_Region,Stops,All\_Flights,Max\_Seats,Year,Month\_num`<- NULL

> dim(flights)

[1] 89312 15

> str(flights)

'data.frame': 89312 obs. of 15 variables:

$ Month : int 37865 37865 37865 37865 37865 37865 37865 37865 37865 37865 ...

$ In\_Out : chr "I" "I" "I" "I" ...

$ Australian\_City : chr "Adelaide" "Adelaide" "Adelaide" "Adelaide" ...

$ International\_City: chr "Denpasar" "Hong Kong" "Kuala Lumpur" "Singapore" ...

$ Airline : chr "Garuda Indonesia" "Cathay Pacific Airways" "Malaysia Airlines" "Qantas Airways" ...

$ Route : chr "DPS-ADL-MEL" "HKG-ADL-MEL" "KUL-ADL" "SIN-DRW-ADL-MEL" ...

$ Port\_Country : chr "Indonesia" "Hong Kong (SAR)" "Malaysia" "Singapore" ...

$ Port\_Region : chr "SE Asia" "NE Asia" "SE Asia" "SE Asia" ...

$ Service\_Country : chr "Indonesia" "Hong Kong (SAR)" "Malaysia" "Singapore" ...

$ Service\_Region : chr "SE Asia" "NE Asia" "SE Asia" "SE Asia" ...

$ Stops : int 0 0 0 1 1 0 0 0 0 0 ...

$ All\_Flights : int 13 8 17 4 9 12 36 18 8 14 ...

$ Max\_Seats : int 3809 2008 4726 908 2038 3876 12624 2556 2296 5404 ...

$ Year : int 2003 2003 2003 2003 2003 2003 2003 2003 2003 2003 ...

$ Month\_num : int 9 9 9 9 9 9 9 9 9 9 ...

> flights\_into\_australia <- flights %>% filter(In\_Out == "I")

> View(flights\_into\_australia)

> flights\_into\_australia\_from\_china <- flights\_into\_australia %>% filter(Port\_Country == "China")

**查看每个变量的格式**

flights\_into\_australia <- flights %>% filter(In\_Out == "I")

View(flights\_into\_australia)

flights\_into\_australia\_from\_china <- flights\_into\_australia %>% filter(Port\_Country == "China")

View(flights\_into\_australia\_from\_china)

> View(flights\_into\_australia\_from\_china)

> dim(flights\_into\_australia\_from\_china)

[1] 2828 15

> str(flights\_into\_australia\_from\_china)

'data.frame': 2828 obs. of 15 variables:

$ Month : int 37865 37865 37865 37865 37865 37865 37865 37865 37865 37865 ...

$ In\_Out : chr "I" "I" "I" "I" ...

$ Australian\_City : chr "Melbourne" "Melbourne" "Melbourne" "Melbourne" ...

$ International\_City: chr "Beijing" "Beijing" "Guangzhou" "Guangzhou" ...

$ Airline : chr "Air China" "Air China" "Air China" "China Southern Airlines" ...

$ Route : chr "BJS-CAN-MEL-SYD" "BJS-SHA-MEL-SYD" "BJS-CAN-MEL-SYD" "CAN-MEL-SYD" ...

$ Port\_Country : chr "China" "China" "China" "China" ...

$ Port\_Region : chr "NE Asia" "NE Asia" "NE Asia" "NE Asia" ...

$ Service\_Country : chr "China" "China" "China" "China" ...

$ Service\_Region : chr "NE Asia" "NE Asia" "NE Asia" "NE Asia" ...

$ Stops : int 1 1 0 0 0 2 2 1 1 1 ...

$ All\_Flights : int 9 5 9 9 5 9 5 12 17 9 ...

$ Max\_Seats : int 2709 1505 2709 2583 1505 2709 1505 3612 4879 2709 ...

$ Year : int 2003 2003 2003 2003 2003 2003 2003 2003 2003 2003 ...

$ Month\_num : int 9 9 9 9 9 9 9 9 9 9 ...

**筛选飞入澳洲的航班**

**继续筛选从大陆飞往澳洲的航班**

**查看新数据集每个变量的格式**

> table(flights\_into\_australia\_from\_china$Australian\_City)

Adelaide Brisbane Cairns Darwin Gold Coast Melbourne Perth Sydney

17 162 36 3 13 926 94 1577

**从大陆飞往澳洲航班中澳洲城市的统计**

> prop.table(table(flights\_into\_australia\_from\_china$Australian\_City))

Adelaide Brisbane Cairns Darwin Gold Coast Melbourne Perth Sydney

0.006011315 0.057284300 0.012729844 0.001060820 0.004596888 0.327439887 0.033239038 0.557637907

**从大陆飞往澳洲航班中澳洲城市的比例统计**

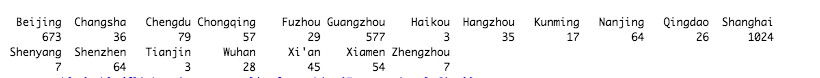
> round(prop.table(table(flights\_into\_australia\_from\_china$Australian\_City)),2)

Adelaide Brisbane Cairns Darwin Gold Coast Melbourne Perth Sydney

0.01 0.06 0.01 0.00 0.00 0.33 0.03 0.56

**从大陆飞往澳洲航班中澳洲城市的比例（小数点后2位）统计**

> table(flights\_into\_australia\_from\_china$International\_City)

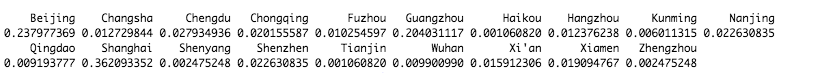


**从大陆飞往澳洲航班中大陆城市的统计**

Shenyang Shenzhen Tianjin Wuhan Xi'an Xiamen Zhengzhou

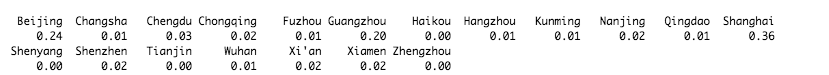
7 64 3 28 45 54 7

> prop.table(table(flights\_into\_australia\_from\_china$International\_City))



**从大陆飞往澳洲航班中大陆城市的比例统计**

> round(prop.table(table(flights\_into\_australia\_from\_china$International\_City)),2)



**从大陆飞往澳洲航班中大陆城市的比例（小数点后2位）统计**