



Don't know where to
go in 2021? Here are
some ideas...

Discover Europe and Asia



Most popular destinations in Europe and Asia

Destinations	Feedback score	Start rating	All-inclusive	Most visited	Avarage cost for 10 days pp
Spain	7	3.2	220	Barcelona	1,200
Italy	9	4.1	180	Rome	1,000
Portugal	5	3.1	134	Lisbon	900
Iceland	1	3.5	86	Reykjavik	1,200
UK	8	3.7	95	London	1,500
Switzerland	9	4.2	60	Geneva	1,800
Sweden	4	3.6	99	Stockholm	1,100
Austria	5	4	45	Viena	1,200
Russia	4	3.3	89	Moscow	800
Mongolia	8	3.2	32	Ulan-Bator	1,000
Japan	1	4.2	85	Tokyo	1,600
South Korea	3	3.9	110	Busan	1,800
China	4	3.1	230	Beijing	1,300
Kazakhstan	1	3	112	Almaty	900
UAE	8	4.6	260	Dubai	1,800
Turkey	7	4.4	340	Antalya	1,000

```
data = pd.read_csv("Hotels.csv")
data
#print(data)
✓ 0.9s
```

	Destinations	Feedback score	Star rating	All-inclusive	Most visited cities	Price for 10 days pp
0	Spain	7	3.2	220	Barcelona	1200
1	Italy	9	4.1	180	Rome	1000
2	Portugal	5	3.1	134	Lisbon	900
3	Iceland	1	3.5	86	Reykjavik	1200
4	UK	8	3.7	95	London	1500
5	Switzerland	9	4.2	60	Geneva	1800
6	Sweden	4	3.6	99	Stockholm	1100
7	Austria	5	4.0	45	Viena	1200
8	Russia	4	3.3	89	Moscow	800
9	Mongolia	1	3.2	32	Ulan-Bator	1000
10	Japan	8	4.2	85	Tokyo	1600
11	South Korea	3	3.9	110	Busan	1800
12	China	4	3.1	230	Beijing	1300
13	Kazakhstan	1	3.0	112	Almaty	900
14	UAE	8	4.6	260	Dubai	1800
15	Turkey	7	4.4	340	Antalya	1000

There are 16
countries to visit

```
#Task 1
```

```
data.shape
```

```
#There are 16 rows and 6 columns in my table
```

LOC and ILOC

```
#Using iloc
```

```
data.iloc[3:9]
```

```
#print (data)
```

```
✓ 0.4s
```

	Destinations	Feedback score	Star rating	All-inclusive	Most visited cities	Price for 10 days pp
3	Iceland	1	3.5	86	Reykjavik	1200
4	UK	8	3.7	95	London	1500
5	Switzerland	9	4.2	60	Geneva	1800
6	Sweden	4	3.6	99	Stockholm	1100
7	Austria	5	4.0	45	Viena	1200
8	Russia	4	3.3	89	Moscow	800

```
#Using loc
```

```
data.loc[3:8]
```

```
✓ 0.4s
```

	Destinations	Feedback score	Star rating	All-inclusive	Most visited cities	Price for 10 days pp
3	Iceland	1	3.5	86	Reykjavik	1200
4	UK	8	3.7	95	London	1500
5	Switzerland	9	4.2	60	Geneva	1800
6	Sweden	4	3.6	99	Stockholm	1100
7	Austria	5	4.0	45	Viena	1200
8	Russia	4	3.3	89	Moscow	800

```
#Mean of all-inclusive hotels
```

```
data["All-inclusive"].mean()
```

```
✓ 0.3s
```

```
136.0625
```

```
data["All-inclusive"].sum()
```

```
✓ 0.3s
```

```
2177
```

There are **2,177** All-inclusive
hotels across all destinations
and the mean number is
136.0625

These are the destinations with the lowest feedback score

```
#Lowest scoring destination

print(data["Feedback score"].min())

myfilter = data["Feedback score"] ==1

myfilter

low_score = data[myfilter]
● low_score
```

[135] ✓ 0.4s

... 1

</>

	Destinations	Feedback score	Star rating	All-inclusive	Most visited cities	Price for 10 days pp
3	Iceland	1	3.5	86	Reykjavik	1200
9	Mongolia	1	3.2	32	Ulan-Bator	1000
13	Kazakhstan	1	3.0	112	Almaty	900

And these are the destinations with the highest feedback score

```
#Highest scoring destination
```

```
print([data["Feedback score"].max()])  
myfilter = data["Feedback score"] == 9  
high_score = data[myfilter]  
high_score
```

[125] ✓ 0.5s

... 9

</>

	Destinations	Feedback score	Star rating	All-inclusive	Most visited cities	Price for 10 days pp
1	Italy	9	4.1	180	Rome	1000
5	Switzerland	9	4.2	60	Geneva	1800

```
#All destinations where more than 100 all inclusive hotels
```

```
all_inc = data["All-inclusive"] > 100
```

```
more_all_inc = data[all_inc]
```

```
more_all_inc
```

```
✓ 0.6s
```

	Destinations	Feedback score	Star rating	All-inclusive	Most visited cities	Price for 10 days pp
0	Spain	7	3.2	220	Barcelona	1200
1	Italy	9	4.1	180	Rome	1000
2	Portugal	5	3.1	134	Lisbon	900
3	Iceland	1	3.5	86	Reykjavik	1200
4	UK	8	3.7	95	London	1500
5	Switzerland	9	4.2	60	Geneva	1800
6	Sweden	4	3.6	99	Stockholm	1100
7	Austria	5	4.0	45	Viena	1200
8	Russia	4	3.3	89	Moscow	800
9	Mongolia	1	3.2	32	Ulan-Bator	1000
10	Japan	8	4.2	85	Tokyo	1600
11	South Korea	3	3.9	110	Busan	1800
12	China	4	3.1	230	Beijing	1300
13	Kazakhstan	1	3.0	112	Almaty	900
14	UAE	8	4.6	260	Dubai	1800
15	Turkey	7	4.4	340	Antalya	1000

There are more than 10
All-inclusive hotels in each
destination

Destinations with the feedback score higher than 8 are Italy and Switzerland

```
# Score above 8
```

```
score = data ["Feedback score"]>8
```

```
score_8 = data[score]
```

```
score_8
```

```
✓ 0.4s
```

	Destinations	Feedback score	Star rating	All-inclusive	Most visited cities	Price for 10 days pp
1	Italy	9	4.1	180	Rome	1000
5	Switzerland	9	4.2	60	Geneva	1800

Destinations with lowest feedback rate are Iceland, Mongolia and Kazakhstan

```
# Score below 2
```

```
score = data ["Feedback score"] < 2
```

```
score_2 = data [score]
```

```
score_2
```

```
✓ 0.4s
```

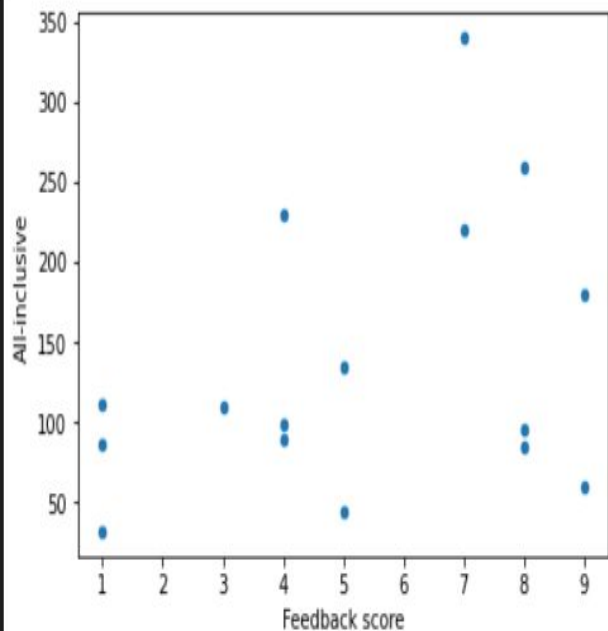
	Destinations	Feedback score	Star rating	All-inclusive	Most visited cities	Price for 10 days pp
3	Iceland	1	3.5	86	Reykjavik	1200
9	Mongolia	1	3.2	32	Ulan-Bator	1000
13	Kazakhstan	1	3.0	112	Almaty	900

```
# Correlation between Feedback Score and All-inclusive
```

```
data.plot.scatter(x="Feedback score", y="All-inclusive")
```

```
✓ 0.2s
```

```
<AxesSubplot:xlabel='Feedback score', ylabel='All-inclusive'>
```

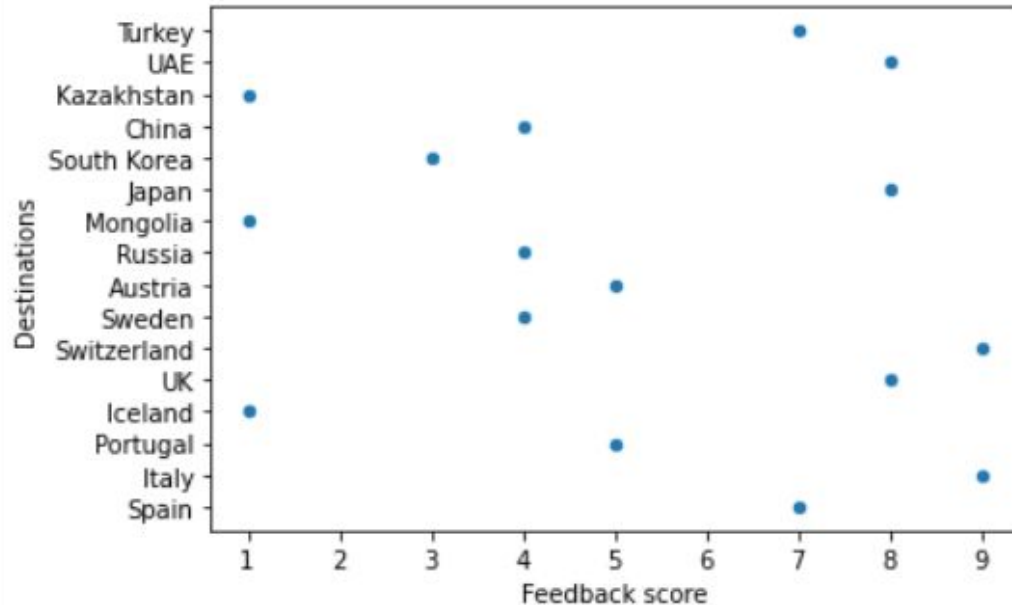


According to correlation between two parameters, number of All-inclusive hotels doesn't impact the Feedback rate.

```
data.plot.scatter(x="Feedback score", y="Destinations")
```

✓ 0.3s

```
<AxesSubplot:xlabel='Feedback score', ylabel='Destinations'>
```



Here is visualisation of
Destinations and Highest
Score

Destinations that suit everyone's budget

```
#Holidays under £1,000
```

```
print(data["Price for 10 days pp"].min())  
my_filter = data["Price for 10 days pp"] <= 1000
```

```
min_price_data = data[my_filter]  
min_price_data
```

```
✓ 0.5s
```

800

	Destinations	Feedback score	Star rating	All-inclusive	Most visited cities	Price for 10 days pp
1	Italy	9	4.1	180	Rome	1000
2	Portugal	5	3.1	134	Lisbon	900
8	Russia	4	3.3	89	Moscow	800
9	Mongolia	1	3.2	32	Ulan-Bator	1000
13	Kazakhstan	1	3.0	112	Almaty	900
15	Turkey	7	4.4	340	Antalya	1000

```
#The most expensive destinations
```

```
print(data["Price for 10 days pp"].max())  
my_filter = data["Price for 10 days pp"] == 1800
```

```
max_price_data = data[my_filter]
```

```
max_price_data
```

```
✓ 0.5s
```

1800

	Destinations	Feedback score	Star rating	All-inclusive	Most visited cities	Price for 10 days pp
5	Switzerland	9	4.2	60	Geneva	1800
11	South Korea	3	3.9	110	Busan	1800
14	UAE	8	4.6	260	Dubai	1800

Conclusion

- Mean number of All-inclusive hotels is **136.0625** and there are more than **10 All-inclusive** hotel in each destination;
- The **lowest** scored destinations are **Iceland, Mongolia** and **Kazakhstan** and the **highest** scored are **Italy** and **Switzerland**;
- There is no relationship between the number of **All-inclusive** hotels and **Feedback score** meaning that the number of All-inclusive hotels doesn't affect the feedback score of visitors.

Enjoy your holidays!

