HOLIDAY DESTINATIONS

Data analysis

A table of destinations

destination	score	hotel_rating	all-incl_hotels	most_visited_city
Sardinia	8.3	3.6	41	Cagliari
Tenerife	7.9	3.8	38	Santa Cruz de Tenerife
Corsica	8.1	3.9	40	Ajaccio
Madeira	1.9	4.3	11	Funchal
Andalucia	7.8	3.7	97	Malaga
Iceland	5.2	2.8	7	Reykjavik
Algarve	8.6	4.7	32	Faro
Bahamas	8.5	2.9	5	Andros Town
Balearic Islands	6.3	3.5	173	Palma
Dalmatia	9.1	3.4	9	Zadar
Goa	8.4	3.1	6	Panaji
Bali	6.5	3.6	154	Denpasar city
Mauritius	9.2	4.1	27	Port Louis
Hawaii	9.3	4.6	118	Honolulu
Cyprus	7.5	4.2	22	Larnaca

Rows and columns

- There are 15 rows and 5 columns in the file.

```
holiday.shape

(15, 5)
```

Rows 3-8 are indices 2-7

```
holiday.iloc[2:8]
```

	destination	score	hotel_rating	all-incl_hotels	most_visited_city
2	Corsica	8.1	3.9	40	Ajaccio
3	Madeira	1.9	4.3	11	Funchal
4	Andalucia	7.8	3.7	97	Malaga
5	Iceland	5.2	2.8	7	Reykjavik
6	Algarve	8.6	4.7	32	Faro
7	Bahamas	8.5	2.9	5	Andros Town

The mean number of all-inclusive hotels across all destinations is 52

```
holiday["all-incl_hotels"].mean()
```

```
52.0
```

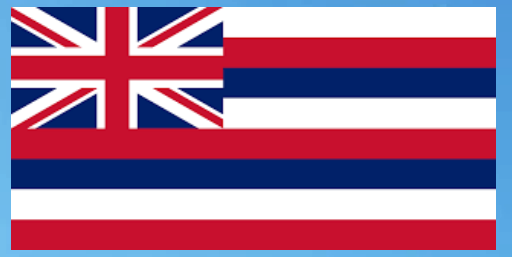
The lowest scoring destination is Madeira!

```
holiday["score"].min()
```

```
1.9
```

```
holiday.loc[holiday.score == 1.9]
```

	destination	score	hotel_rating	all-incl_hotels	most_visited_city
3	Madeira	1.9	4.3	11	Funchal



The highest scoring destination is Hawaii!

```
holiday["score"].max()
```

```
9.3
```

```
holiday.loc[holiday.score == 9.3]
```

	destination	score	hotel_rating	all-incl_hotels	most_visited_city
13	Hawaii	9.3	4.6	118	Honolulu

All the destinations with more than 9 all-inclusive hotels

```
more_than9_allincl = holiday["all-incl_hotels"] > 9
print(holiday[more_than9_allincl])
```

```
          destination  score  hotel_rating  all-incl_hotels  \
0            Sardinia    8.3           3.6               41
1            Tenerife    7.9           3.8               38
2             Corsica    8.1           3.9               40
3             Madeira    1.9           4.3               11
4           Andalucia    7.8           3.7               97
6             Algarve    8.6           4.7               32
8   Balearic Islands     6.3           3.5              173
11               Bali    6.5           3.6              154
12          Mauritius    9.2           4.1               27
13             Hawaii    9.3           4.6              118
14             Cyprus    7.5           4.2               22

          most_visited_city
0                  Cagliari
1   Santa Cruz de Tenerife
2                  Ajaccio
3                  Funchal
4                   Malaga
6                     Faro
8                    Palma
11            Denpasar city
12               Port Louis
13                 Honolulu
14                  Larnaca
```

All destinations with feedback score above 8

```
score_above8 = holiday["score"] > 8
score_filter = holiday[score_above8]
print(score_filter)
```

	destination	score	hotel_rating	all-incl_hotels	most_visited_city
0	Sardinia	8.3	3.6	41	Cagliari
2	Corsica	8.1	3.9	40	Ajaccio
6	Algarve	8.6	4.7	32	Faro
7	Bahamas	8.5	2.9	5	Andros Town
9	Dalmatia	9.1	3.4	9	Zadar
10	Goa	8.4	3.1	6	Panaji
12	Mauritius	9.2	4.1	27	Port Louis
13	Hawaii	9.3	4.6	118	Honolulu

All destinations with score below 2

```
score_below2 = holiday["score"] < 2
ScoreFilter = holiday[score_below2]
print(ScoreFilter)
```

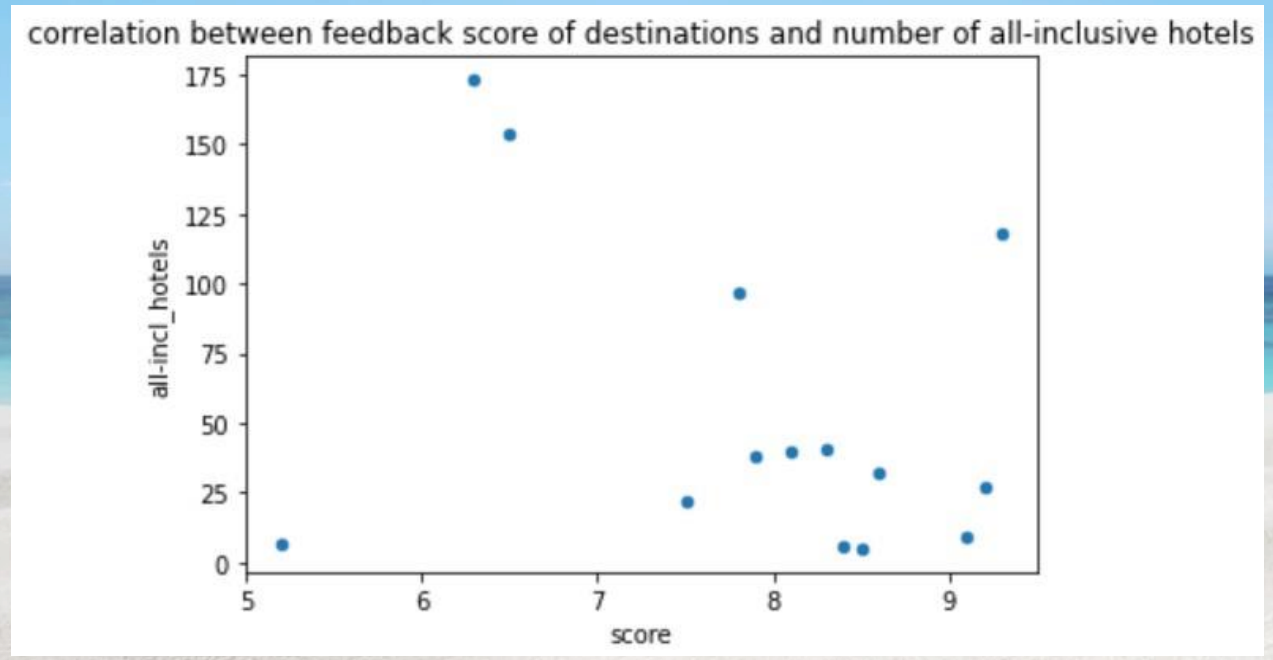
```
  destination  score  hotel_rating  all-incl_hotels most_visited_city
3     Madeira    1.9           4.3               11           Funchal
```

Destination Madeira was removed due to scoring below 2

```
holiday.drop([3], axis=0, inplace=True)
print(holiday)
```

```
         destination  score  hotel_rating  all-incl_hotels  \          most_visited_city
0           Sardinia    8.3           3.6               41                   Cagliari
1          Tenerife     7.9           3.8               38     Santa Cruz de Tenerife
2           Corsica     8.1           3.9               40                   Ajaccio
4         Andalucia     7.8           3.7               97                    Malaga
5           Iceland     5.2           2.8                7                 Reykjavik
6           Algarve     8.6           4.7               32                     Faro
7           Bahamas     8.5           2.9                5               Andros Town
8   Balearic Islands    6.3           3.5              173                     Palma
9           Dalmatia    9.1           3.4                9                    Zadar
10             Goa      8.4           3.1                6                    Panaji
11            Bali      6.5           3.6              154           Denpasar city
12        Mauritius     9.2           4.1               27              Port Louis
13           Hawaii     9.3           4.6              118                 Honolulu
14           Cyprus     7.5           4.2               22                  Larnaca
```

A Correlation between number of all-inclusive hotels and score



- Correlation coefficient between these two variables is very close to zero = there is weak relationship between feedback score of destinations and number of all-inclusive hotels

```
holiday[['score','all-incl_hotels']].corr()
```

	score	all-incl_hotels
score	1.00000	-0.30938
all-incl_hotels	-0.30938	1.00000

```
holiday.plot.scatter(x="score", y="all-incl_hotels").set_title("correlation between feedback score of destinations
```

Data visualisation diagram of destinations and highest scores

```
Holiday = holiday[["destination", "score"]]
score_above8 = Holiday["score"] > 8
score_Filter = Holiday[score_above8]
print(score_Filter)
sorted_score = score_Filter.sort_values("score",ascending=False)
sorted_score.plot("destination", "score").set_title("destinations with the highest score")
```

```
   destination  score
0     Sardinia    8.3
2      Corsica    8.1
6      Algarve    8.6
7      Bahamas    8.5
9     Dalmatia    9.1
10         Goa    8.4
12   Mauritius    9.2
13      Hawaii    9.3
```