!pip install pandas-profiling

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Requirement already satisfied: pandas-profiling in /usr/local/lib/python3.9/dist-packages (3.2.0)
    Requirement already satisfied: PyYAML>=5.0.0 in /usr/local/lib/python3.9/dist-packages (from pandas-profiling) (6.0)
    Requirement already satisfied: missingno>=0.4.2 in /usr/local/lib/python3.9/dist-packages (from pandas-profiling) (0.5.2)
    Requirement already satisfied: pandas!=1.0.0,!=1.0.1,!=1.0.2,!=1.1.0,>=0.25.3 in /usr/local/lib/python3.9/dist-packages (from pandas-pr
    Requirement already satisfied: jinja2>=2.11.1 in /usr/local/lib/python3.9/dist-packages (from pandas-profiling) (3.1.2)
    Requirement already satisfied: tangled-up-in-unicode==0.2.0 in /usr/local/lib/python3.9/dist-packages (from pandas-profiling) (0.2.0)
   Requirement already satisfied: markupsafe~=2.1.1 in /usr/local/lib/python3.9/dist-packages (from pandas-profiling) (2.1.2)
    Requirement already satisfied: requests>=2.24.0 in /usr/local/lib/python3.9/dist-packages (from pandas-profiling) (2.27.1)
    Requirement already satisfied: seaborn>=0.10.1 in /usr/local/lib/python3.9/dist-packages (from pandas-profiling) (0.12.2)
   Requirement already satisfied: pydantic>=1.8.1 in /usr/local/lib/python3.9/dist-packages (from pandas-profiling) (1.10.7)
    Requirement already satisfied: visions[type_image_path] == 0.7.4 in /usr/local/lib/python3.9/dist-packages (from pandas-profiling) (0.7.4
    Requirement already satisfied: scipy>=1.4.1 in /usr/local/lib/python3.9/dist-packages (from pandas-profiling) (1.10.1)
   Requirement already satisfied: htmlmin>=0.1.12 in /usr/local/lib/python3.9/dist-packages (from pandas-profiling) (0.1.12)
    Requirement already satisfied: tqdm>=4.48.2 in /usr/local/lib/python3.9/dist-packages (from pandas-profiling) (4.65.0)
    Requirement already satisfied: phik>=0.11.1 in /usr/local/lib/python3.9/dist-packages (from pandas-profiling) (0.12.3)
    Requirement already satisfied: joblib~=1.1.0 in /usr/local/lib/python3.9/dist-packages (from pandas-profiling) (1.1.1)
    Requirement already satisfied: numpy>=1.16.0 in /usr/local/lib/python3.9/dist-packages (from pandas-profiling) (1.22.4)
   Requirement already satisfied: multimethod>=1.4 in /usr/local/lib/python3.9/dist-packages (from pandas-profiling) (1.9.1)
    Requirement already satisfied: matplotlib>=3.2.0 in /usr/local/lib/python3.9/dist-packages (from pandas-profiling) (3.7.1)
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    Requirement already satisfied: networkx>=2.4 in /usr/local/lib/python3.9/dist-packages (from visions[type_image_path]==0.7.4->pandas-pr
    Requirement already satisfied: Pillow in /usr/local/lib/python3.9/dist-packages (from visions[type_image_path] == 0.7.4->pandas-profiling
    Requirement already satisfied: imagehash in /usr/local/lib/python3.9/dist-packages (from visions[type_image_path]==0.7.4->pandas-profil
   Requirement already satisfied: python-dateutil>=2.7 in /usr/local/lib/python3.9/dist-packages (from matplotlib>=3.2.0->pandas-profiling
    Requirement already satisfied: pyparsing>=2.3.1 in /usr/local/lib/python3.9/dist-packages (from matplotlib>=3.2.0->pandas-profiling) (3
    Requirement already satisfied: contourpy>=1.0.1 in /usr/local/lib/python3.9/dist-packages (from matplotlib>=3.2.0->pandas-profiling) (1
    Requirement already satisfied: importlib-resources>=3.2.0 in /usr/local/lib/python3.9/dist-packages (from matplotlib>=3.2.0->pandas-pro
    Requirement already satisfied: packaging>=20.0 in /usr/local/lib/python3.9/dist-packages (from matplotlib>=3.2.0->pandas-profiling) (23
    Requirement already satisfied: cycler>=0.10 in /usr/local/lib/python3.9/dist-packages (from matplotlib>=3.2.0->pandas-profiling) (0.11.
   Requirement already satisfied: kiwisolver>=1.0.1 in /usr/local/lib/python3.9/dist-packages (from matplotlib>=3.2.0->pandas-profiling) (
    Requirement already satisfied: fonttools>=4.22.0 in /usr/local/lib/python3.9/dist-packages (from matplotlib>=3.2.0->pandas-profiling)
    Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/python3.9/dist-packages (from pandas!=1.0.0,!=1.0.1,!=1.0.2,!=1.1.0,>=0.2
   Requirement already satisfied: typing-extensions>=4.2.0 in /usr/local/lib/python3.9/dist-packages (from pydantic>=1.8.1->pandas-profili
    Requirement already satisfied: charset-normalizer~=2.0.0 in /usr/local/lib/python3.9/dist-packages (from requests>=2.24.0->pandas-profi
   Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.9/dist-packages (from requests>=2.24.0->pandas-profiling) (3.4)
    Requirement already satisfied: urllib3<1.27,>=1.21.1 in /usr/local/lib/python3.9/dist-packages (from requests>=2.24.0->pandas-profiling
    Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.9/dist-packages (from requests>=2.24.0->pandas-profiling) (
   Requirement already satisfied: zipp>=3.1.0 in /usr/local/lib/python3.9/dist-packages (from importlib-resources>=3.2.0->matplotlib>=3.2.
    Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.9/dist-packages (from python-dateutil>=2.7->matplotlib>=3.2.0->pandas
   Requirement already satisfied: PyWavelets in /usr/local/lib/python3.9/dist-packages (from imagehash->visions[type_image_path]==0.7.4->p
```

from pandas\_profiling import ProfileReport

import pandas as pd
df=pd.read\_csv('/content/sample\_data/california\_housing\_train.csv')
df.head()

		longitude	latitude	housing_median_age	total_rooms	total_bedrooms	population	ho
	0	-114.31	34.19	15.0	5612.0	1283.0	1015.0	
	1	-114.47	34.40	19.0	7650.0	1901.0	1129.0	
	2	-114.56	33.69	17.0	720.0	174.0	333.0	
	3	-114.57	33.64	14.0	1501.0	337.0	515.0	
	4	-114.57	33.57	20.0	1454.0	326.0	624.0	
4	(							•

res=ProfileReport(df)
res

Summarize dataset:

100%

Generate report structure: 100%

Render HTML: 100%

103/103 [00:24<00:00, 4.10it/s,

Completed]

1/1 [00:07<00:00, 7.86s/it]

1/1 [00:04<00:00, 4.95s/it]



## **Dataset statistics**

Number of variables	9
Number of observations	17000
Missing cells	0
Missing cells (%)	0.0%
Duplicate rows	0
Duplicate rows (%)	0.0%
Total size in memory	1.2 MiB
Average record size in memory	72.0 B

## Variable types

res.to\_file('result.html');

Export report to file: 100%

1/1 [00:00<00:00, 14.34it/s]

longitude is highly correlated with latitude	High correlation
latitude is highly correlated with longitude	High correlation
total_rooms is highly correlated with total_bedrooms and <u>2 other fields</u> (total_bedrooms, population, households)	High correlation
total bedrooms is highly correlated with total rooms and 2 other fields	High correlation

Colab paid products - Cancel contracts here

✓ 0s completed at 10:33 PM