

```

import pandas as pd
import numpy as np

# Creating random data for the DataFrame
np.random.seed(42) # Setting seed for reproducibility
data = {
    'Feature1': np.random.rand(10),
    'Feature2': np.random.randint(1, 100, 10),
    'Feature3': np.random.choice(['A', 'B', 'C'], 10),
    'Feature4': np.random.randn(10),
    'Feature5': np.random.uniform(0, 1, 10)
}

# Creating the DataFrame
df = pd.DataFrame(data)

# Displaying the DataFrame
print(df)

```

	Feature1	Feature2	Feature3	Feature4	Feature5
0	0.374540	22	A	-0.251044	0.942202
1	0.950714	53	B	-0.163867	0.563288
2	0.731994	2	B	-1.476330	0.385417
3	0.598658	88	A	1.486981	0.015966
4	0.156019	30	A	-0.024455	0.230894
5	0.155995	38	A	0.355551	0.241025
6	0.058084	2	C	0.417011	0.683264
7	0.866176	64	C	0.832462	0.609997
8	0.601115	60	C	-0.293399	0.833195
9	0.708073	21	B	-0.029839	0.173365

```

print(df.info())

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 10 entries, 0 to 9
Data columns (total 5 columns):
#   Column      Non-Null Count  Dtype
---  -
0   Feature1    10 non-null    float64
1   Feature2    10 non-null    int32
2   Feature3    10 non-null    object
3   Feature4    10 non-null    float64
4   Feature5    10 non-null    float64
dtypes: float64(3), int32(1), object(1)
memory usage: 488.0+ bytes
None

```

```

print(df.describe(include='all'))

```

	Feature1	Feature2	Feature3	Feature4	Feature5
count	10.000000	10.000000	10	10.000000	10.000000

unique	NaN	NaN	3	NaN	NaN
top	NaN	NaN	A	NaN	NaN
freq	NaN	NaN	4	NaN	NaN
mean	0.520137	38.000000	NaN	0.085307	0.467861
std	0.315866	28.059461	NaN	0.780928	0.305417
min	0.058084	2.000000	NaN	-1.476330	0.015966
25%	0.210649	21.250000	NaN	-0.229250	0.233427
50%	0.599887	34.000000	NaN	-0.027147	0.474352
75%	0.726014	58.250000	NaN	0.401646	0.664947
max	0.950714	88.000000	NaN	1.486981	0.942202

```
observation_4 = df.loc[4]
```

```
print(observation_4)
```

```
Feature1    0.156019
```

```
Feature2         30
```

```
Feature3         A
```

```
Feature4   -0.024455
```

```
Feature5    0.230894
```

```
Name: 4, dtype: object
```

```
null_values = df.isnull().sum()
```

```
print(null_values)
```

```
Feature1    0
```

```
Feature2    0
```

```
Feature3    0
```

```
Feature4    0
```

```
Feature5    0
```

```
dtype: int64
```