

```
In [1]: import pandas as pd
```

```
In [2]: data = {
    'feature1': [3.2, 4.5, 6.7, 2.1, 5.4, 7.8, 1.2, 4.3, 2.8, 6.1],
    'feature2': [12, 15, 18, 10, 14, 17, 9, 13, 11, 16],
    'feature3': ['A', 'B', 'C', 'A', 'C', 'B', 'A', 'C', 'B', 'A'],
    'feature4': [True, False, True, True, False, False, True, True, True, False],
    'feature5': [0.1, 0.5, 0.3, 0.9, 0.7, 0.2, 0.8, 0.6, 0.4, 0.9]
}

df = pd.DataFrame(data)
```

```
In [3]: 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     int64
2   feature3    10 non-null     object
3   feature4    10 non-null     bool
4   feature5    10 non-null     float64
dtypes: bool(1), float64(2), int64(1), object(1)
memory usage: 462.0+ bytes
None
```

```
In [4]: print(df.describe())
```

	feature1	feature2	feature5
count	10.000000	10.000000	10.000000
mean	4.410000	13.500000	0.540000
std	2.115787	3.027650	0.287518
min	1.200000	9.000000	0.100000
25%	2.900000	11.250000	0.325000
50%	4.400000	13.500000	0.550000
75%	5.925000	15.750000	0.775000
max	7.800000	18.000000	0.900000

```
In [5]: observation_4 = df.loc[4]
print(observation_4)
```

```
feature1    5.4
feature2    14
feature3     C
feature4   False
feature5    0.7
Name: 4, dtype: object
```

```
In [6]: print(df.isnull().sum())
```

```
feature1    0  
feature2    0  
feature3    0  
feature4    0  
feature5    0  
dtype: int64
```

In []: