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```
import numpy as np
import pandas as pd

d={'Name':['John','Doe','Scarlet','Violet','Elena','Sherlock','Satoru','Saitama','Vash','Giorno'], 'Age':[22,24,27,21,23,31,28,30,26,18],
  'Class':['A','B','C','B','A','A','A','A','C','B'], 'Grades':['A','A','A','B','B','S','S','A','B','A'], 'Blood Type':['A+','A-','O+','O+',
df=pd.DataFrame(d)
df
```

	Name	Age	Class	Grades	Blood Type
0	John	22	A	A	A+
1	Doe	24	B	A	A-
2	Scarlet	27	C	A	O+
3	Violet	21	B	B	O+
4	Elena	23	A	B	AB+
5	Sherlock	31	A	S	O-
6	Satoru	28	A	S	B+
7	Saitama	30	A	A	A+
8	Vash	26	C	B	AB-
9	Giorno	18	B	A	O+

```
df.info()

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 10 entries, 0 to 9
Data columns (total 5 columns):
#   Column      Non-Null Count  Dtype
---  -
0   Name        10 non-null     object
1   Age         10 non-null     int64
2   Class       10 non-null     object
3   Grades      10 non-null     object
4   Blood Type  10 non-null     object
dtypes: int64(1), object(4)
memory usage: 528.0+ bytes
```



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

	Name	Age	Class	Grades	Blood Type
count	10	10.000000	10	10	10
unique	10	NaN	3	3	7
top	John	NaN	A	A	O+
freq	1	NaN	5	5	3
mean	NaN	25.000000	NaN	NaN	NaN
std	NaN	4.136558	NaN	NaN	NaN
min	NaN	18.000000	NaN	NaN	NaN
25%	NaN	22.250000	NaN	NaN	NaN
50%	NaN	25.000000	NaN	NaN	NaN
75%	NaN	27.750000	NaN	NaN	NaN
max	NaN	31.000000	NaN	NaN	NaN

```
df.loc[3]

Name      Violet
Age       21
Class     B
Grades    B
Blood Type O+
Name: 3, dtype: object
```



```
df.isnull()
```

	Name	Age	Class	Grades	Blood Type	
0	False	False	False	False	False	
1	False	False	False	False	False	
2	False	False	False	False	False	
3	False	False	False	False	False	
4	False	False	False	False	False	
5	False	False	False	False	False	
6	False	False	False	False	False	
7	False	False	False	False	False	
8	False	False	False	False	False	
9	False	False	False	False	False	


```
df.iloc[3]
```


Name Violet
Age 21
Class B
Grades B
Blood Type O+
Name: 3, dtype: object

```
df.columns=['Random value 1','Random value 2','Random value 3','Random value 4','Random value 5']  
df
```



	Random value 1	Random value 2	Random value 3	Random value 4	Random value 5	
0	John	22	A	A	A+	
1	Doe	24	B	A	A-	
2	Scarlet	27	C	A	O+	
3	Violet	21	B	B	O+	
4	Elena	23	A	B	AB+	
5	Sherlock	31	A	S	O-	
6	Satoru	28	A	S	B+	
7	Saitama	30	A	A	A+	
8	Vash	26	C	B	AB-	
9	Giorno	18	B	A	O+	

```
df.iloc[1:3]
```



	Random value 1	Random value 2	Random value 3	Random value 4	Random value 5	
1	Doe	24	B	A	A-	
2	Scarlet	27	C	A	O+	

```
df.iloc[:,1:3]
```

	Random value 2	Random value 3	
0	22	A	
1	24	B	
2	27	C	
3	21	B	
4	23	A	
5	31	A	
6	28	A	
7	30	A	
8	26	C	
9	18	B	

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