In [1]:

```python
import numpy as np
import pandas as pd
```

In [2]:

```python
df1 = pd.DataFrame({'A':[1,2,3],'B':[4,5,6]},index=[19,20,21])
df2 = pd.DataFrame({'C':['a','b','c'],'D':['d','e','f']},index=[20,21,22])
```

In [3]:

```python
df1
```

Out[3]:

	A	B
19	1	4
20	2	5
21	3	6

In [4]:

```python
df2
```

Out[4]:

	C	D
20	a	d
21	b	e
22	c	f

União de DataFrames

In [5]:

```python
pd.concat([df1,df2], axis=1)
```

Out[5]:

	A	B	C	D
19	1.0	4.0	NaN	NaN
20	2.0	5.0	a	d
21	3.0	6.0	b	e
22	NaN	NaN	c	f

In [6]:

```python
df1.join(df2,how='outer').fillna(df1['A'].mean())
```

Out[6]:

	A	B	C	D
19	1.0	4.0	2.0	2.0
20	2.0	5.0	a	d
21	3.0	6.0	b	e
22	2.0	2.0	c	f

Filtros

In [7]:

```python
df1['C']=[8,10,12]
```

In [8]:

```python
df1.loc[22]=[13,16,19]
```

In [9]:

```python
df1
```

Out[9]:

	A	B	C
19	1	4	8
20	2	5	10
21	3	6	12
22	13	16	19

In [10]:

```python
df1[df1['A']>2]
```

Out[10]:

	A	B	C
21	3	6	12
22	13	16	19

In [11]:

```python
df1[ (df1['A']>2) & (df1['C']>15)]
```

Out[11]:

	A	B	C
22	13	16	19

In [12]:

```python
df1[df1['B'] == 5]
```

Out[12]:

	A	B	C
20	2	5	10

In [13]:

```python
df1[ (df1['A']>2) | (df1['C']>15)]
```

Out[13]:

	A	B	C
21	3	6	12
22	13	16	19

Função apply

In [14]:

```python
df1
```

Out[14]:

	A	B	C
19	1	4	8
20	2	5	10
21	3	6	12
22	13	16	19

In [15]:

```python
df1.apply(lambda x:x*3)
```

Out[15]:

	A	B	C
19	3	12	24
20	6	15	30
21	9	18	36
22	39	48	57

In [16]:

```python
def maioresCincoA(x):
    if x > 5:
        return True
    else:
        return False
df1['A'].apply(maioresCincoA)
```

Out[16]:

```
19    False
20    False
21    False
22     True
Name: A, dtype: bool
```

In [17]:

```python
df1['Maiores'] = df1['A'].apply(maioresCincoA)
```

In [18]:

```python
df1
```

Out[18]:

	A	B	C	Maiores
19	1	4	8	False
20	2	5	10	False
21	3	6	12	False
22	13	16	19	True

In [ ]: