

m06_02_apply_map_lambda

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1 Curso de Python do DS ao DEV

Comunidade DS - Meigarom Lopes

2 Modulo 06 - Módulo Avançado

3 Apply, Map, Lambda

3.0.1 1.0. A função Lambda

```
[28]: def calculation( a, b ):
      c = a + b
      return c
```

```
[25]: calculation( 10, 40 )
```

```
[25]: 50
```

```
[27]: f_calculation = lambda a, b: a + b
```

```
[31]: f_calculation( 70, 40 )
```

```
[31]: 110
```

3.0.2 2.0. A função Map

```
[34]: cols_old = ['Store', 'DayOfWeek', 'Date', 'Sales', 'Customers', 'Open',
    ↪ 'Promo', 'StateHoliday', 'SchoolHoliday',
    ↪ 'StoreType', 'Assortment', 'CompetitionDistance',
    ↪ 'CompetitionOpenSinceMonth',
    ↪ 'CompetitionOpenSinceYear', 'Promo2', 'Promo2SinceWeek',
    ↪ 'Promo2SinceYear', 'PromoInterval']

# function
snakecase = lambda x: x.lower()

# map
list( map( snakecase, cols_old ) )
```

```
[34]: ['store',
    'dayofweek',
    'date',
    'sales',
    'customers',
    'open',
    'promo',
    'stateholiday',
    'schoolholiday',
    'storetype',
    'assortment',
    'competitiondistance',
    'competitionopensincemonth',
    'competitionopensinceyear',
    'promo2',
    'promo2sinceweek',
    'promo2sinceyear',
    'promointerval']
```

```
[37]: import pandas as pd
```

```
[40]: data = {'nome': ['Meigarom', 'Diego', 'Fernandes', 'Lopes'],
    ↪ 'idade': [18, 22, 26, 36],
    ↪ 'altura': [180, 200, 210, 240] }

df = pd.DataFrame( data )
```

```
[45]: #decimal = lambda x: int( x/10 )

def decimal( x ):
    return int( x/10 )

df['new_altura'] = list( map( decimal, df['altura'] ) )
df
```

```
[45]:
```

	nome	idade	altura	new_altura
0	Meigarom	18	180	18
1	Diego	22	200	20
2	Fernandes	26	210	21
3	Lopes	36	240	24

3.0.3 3.0. A função Apply

```
[ ]: map -> generico -> library base
      apply -> pandas -> library pandas
```

```
[51]: function_exp = lambda x: x*100

df['new_altura_02'] = df['altura'].apply( function_exp )
df
```

```
[51]:
```

	nome	idade	altura	new_altura	new_altura_02
0	Meigarom	18	180	18	18000
1	Diego	22	200	20	20000
2	Fernandes	26	210	21	21000
3	Lopes	36	240	24	24000