

Recordando alguns conceitos aprendidos

Considere o código abaixo e o resultado que ele retorna:

In [1]:

```
import geopandas as gpd
from shapely.geometry import Point, Polygon

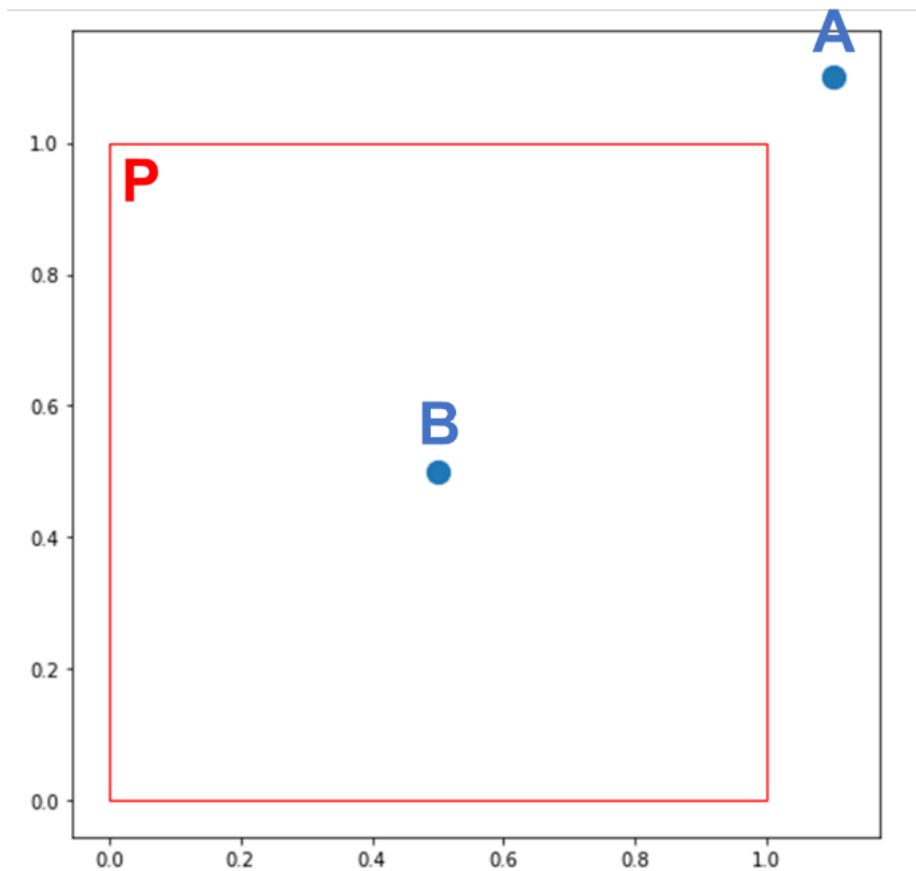
Square = Polygon([(0, 0), (1, 0), (1, 1), (0, 1)])

Point_A = Point(1.1, 1.1)
Point_B = Point(0.5, 0.5)

points = gpd.GeoDataFrame(geometry=[Point_A, Point_B], index=['A', 'B'])
polygon = gpd.GeoDataFrame(geometry=[Square], index=['P'])

base = polygon.plot(color='white', edgecolor='red', figsize=(15,8))
points.plot(ax=base, markersize=150)
```

Out [1]:



As linhas de código abaixo utilizam os GeoDataFrames `points` e `polygon` :

A)

```
points.loc['B'].geometry.within(polygon.iloc[0].geometry)
```

B)

```
polygon.iloc[0].geometry.contains(points.loc['A'].geometry)
```

C)

```
points.distance(points.loc['A'].geometry).iloc[0]
```

D)

```
points.distance(points.loc['B'].geometry).loc['B']
```

E)

```
polygon['geometry'].apply(lambda x: points.distance(x))['B'].iloc[0]
```

Selecione a alternativa que apresenta a resposta correta para os *outputs* de cada linha acima.

Selecione uma alternativa

A A) True; B) False; C) 0.84; D) 1.0; E) 0.0

B A) True; B) False; C) 0.0; D) 0.0; E) 0.0

C A) False; B) False; C) 0.0; D) 1.0; E) 0.0

D A) False; B) True; C) 0.0; D) 0.0; E) 0.0