

A pandas series is a one-dimensional array. Store any data type supported in Python and use labels to index the values. The labels form the index and can be strings or integers.

Series are pandas' main data structure for storing one-dimensional data.

1. A market study revealed the price of a product charged in different cities in Portugal presented in the following table:

Bragança	Braga	Porto	Aveiro	Coimbra	Leiria		Lisbon	Beja	Évora	Faro
10.3	10.6	11.5	12.3	9.9	9.3		12.1	10.9	11.4	9.1

Taking advantage of the potential of the pandas/Python series data type

- Using the data in the table above, create the series "prcSerie" with the prices and respective city.
 - View the series in the order created and in reverse order: from the end to the beginning
 - View prices for the first three cities: Bragança, Braga and Porto
 - View prices for the last three cities: Beja, Évora, Faro
 - View prices for cities: Aveiro, Coimbra, Leiria, Lisbon
 - Which cities have prices below the average?
 - Which cities have the highest and lowest prices?
 - Which cities have prices between 11 and 12?
 - Reduce prices in cities with prices higher than average prices by 2.5%
 - View the values in descending order of prices.
2. The Ministry of Health carried out a study on the percentage of male and female smokers in schools in different cities across the country. The results obtained are those indicated in the following table:

	Aveiro	Braga	Porto	Viseu	Coimbra	Covilhã	Leiria	Lisbon	Setúbal	Faro
Women	50.3	60.6	71.5	59.1	82.3	50.9	79.3	41.4	80.9	72.1
Men	54.4	52.4	67.1	78.3	59.2	65.1	86.3	81.3	57.3	61.3

- Store the information provided in a suitable object.
- What is the average percentage of men and women who smoke? What is the average number of smokers in each city?
- Which two cities have the highest percentage of female smokers?

- d) Which city has the greatest difference between the percentage of men and women who smoke?
- e) Which cities have the % of female smokers higher than the % of male smokers?
- f) For each city, indicate which sex smokes the most?