

## **Unemployment assignment**

## Statement

## Description

The **UnemploymentSpain.dat** dataset contains the unemployment figures for Spain for every month between January 2001 and October 2022. The total unemployment is given.

## Tasks

- a) Identify the best Seasonal ARIMA model to forecast the total unemployment rate.
- b) Identify the best SARIMAX model to forecast the total unemployment rate accounting for the COVID-19 period using an intervention variable.
- c) Compare both models.
- d) Apply nonlinear techniques for forecasting the unemployment
- e) Obtain the best forecast for the unemployment rate of November 2022

Write a report describing the process followed for each task.

