# Technical Test

## Objective:

* Data Collection
* Data Preprocessing
* Data Analysis
* Data Visualization

## Background Problem

The inflation rate is one indicator of a country's economy. High and unstable inflation certainly has an impact on the socio-economic conditions of the community. One of them is inflation will affect interest rates which directly or indirectly affect the demand for credit.

[Pengaruh Inflasi terhadap Bunga Bank (bunghatta.ac.id)](https://ekonomi.bunghatta.ac.id/index.php/id/artikel/458-pengaruh-inflasi-terhadap-bunga-bank)

## Task

Generate insights regarding the inflation rate in Indonesia, from data collection to visualization done using the **Python** programming language.

* Data Collection

Data sources can come from anywhere. One of them is from the [BPS](https://www.bps.go.id/subject/3/inflasi.html#subjekViewTab2) website. The data can be enriched with other data such as data on GDP growth rates, inflation rates in other countries, or BI interest rates.

* Data Preprocessing and Analysis

Data processing and analysis is done using Python for example by using the Pandas library.

* Data Visualization

What needs to be visualized is **free based on findings or insights during exploration or that you find interesting to convey**. Provide a brief explanation for each visualization.

Data visualization can use matplotlib or seaborn for static visualization, for interactive ones you can use plotly or altair.

In addition to exploration, data visualization is used to convey the insight.

An example of a visualization related to inflation can be seen in [Databoks](https://databoks.katadata.co.id/tags/inflasi).

*[Optional] Can add dashboards created using BI Tools such as Tableau Public (links can be shared).*

## Submission

* The code and process are well documented in the form of a Jupyter notebook (.ipynb file).
* Image file (visualization result) in the form of .jpg, .png or the appropriate file format.  
  Tableau public link if any.

## Notes

All the libraries mentioned are not a limitation, be creative. If the presentation of data and insight is more interesting, it will be better.

# Good Luck!