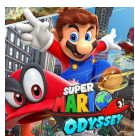**Welcome to Maknadata!**

Thank you for your interest in joining our team. At Maknadata, we believe that working with data is not only impactful but also a lot of fun—and we want you to experience that excitement even before you officially start!

As you dive into this *Data Odyssey* test, we hope you'll feel the thrill of solving real-world challenges and enjoy the journey of discovery. During this interview, let's take this opportunity to learn from each other and embrace the process. Welcome aboard—we're excited to see where your skills and curiosity take you!

🌐 Welcome to Data Odyssey 1: Your Mission to Save the Kingdom!

Data Reference:

https://drive.google.com/file/d/1qLd05py9I2IUF2oOF7IoT-SRH2hz0NRI/view?usp=drive_link

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Level 1: The Data Kingdom's Entry Gate – Understanding the Terrain

🌍 *Mission*: As Mario, you're entering the mysterious land of the Data Kingdom. Your first goal is to explore this world and uncover its secrets by performing Exploratory Data Analysis (EDA). Just like Mario scanning the land for hidden pathways and coins, you'll search for patterns, trends, and anomalies. Watch out for any tricky "data gaps" that could lead you off the trail!

Level 2: Power-Ups & Special Abilities – Finding the Drivers of Churn

💡 **Mission**: You've unlocked new insights, giving you a set of "data power-ups" (like Mario's Super Stars and Mushrooms) <u>to find what's driving churn</u>. Use these power-ups to get deeper insights! By identifying key factors, you'll start to see the underlying forces pulling customers away. Each discovery is a "Power Moon" lighting your way to the end.

Level 3: The Compass of Prediction – Building a Predictive Model

🧭 **Mission**: You've gathered enough Power Moons to activate the Compass—a predictive model that acts like a map, guiding you to high-risk customers before they churn. Imagine this like unlocking Mario's Compass to guide him through hidden challenges. With it, you'll be able to understand the customer journey better and locate "danger zones" for potential churn.

Level 4: The Final Boss Battle – Presenting Your Findings

🏆 **Mission**: Now it's time to face the Final Boss—presenting your insights to Telco Company. This is where you'll combine all your Power Moons and discoveries into a clear, powerful presentation. Just as Mario faces Bowser with a mix of skill, strategy, and timing, you'll aim to deliver a narrative that captures attention, drives action, and "rescues" the kingdom (aka the customer base) from decline.

Congratulations! You've Cleared the Level!

🎉 **Reward**: By completing this journey, you've not only defeated the final boss but unlocked new levels of insight for Telco Company. Each insight brings value to the kingdom, helping it grow stronger and more resilient. And you? You've proven yourself as a true Data Odyssey hero!

🎮 Welcome to Data Odyssey 2: The Quest for Language Mastery! 🎮

Data Reference: .

Using notebook you can import dari library sklearn:

Level 1: The Language Kingdom's Gateway – Understanding the Terrain

🌍 *Mission*: Just like Mario stepping into a new world, you're entering the vast landscape of the Language Kingdom. Your first task is to perform an initial analysis, exploring a dataset filled with text data. You'll decode language patterns, analyze word distributions, and detect hidden themes. Imagine each insight as a "Coin" helping you build a foundation to understand the terrain!

Level 2: Power-Ups & Secret Moves – Building NLP Pipelines

💡 *Mission*: Now that you've mapped the basics, it's time to unlock your toolkit—using NLP techniques to preprocess text data, identify keywords, and capture meaning. Each technique (like tokenization, lemmatization, or sentiment analysis) is like finding Power-Ups that help you move faster and discover more. With these tools, you're ready to tackle the Language Kingdom's deeper secrets!

Level 3: The Generative Vault – Creating New Content with AI

🧠 *Mission*: You've gathered enough power to enter the Generative Vault, where you'll build a simple generative model to create new text based on the patterns you discovered. Think of this as Mario gaining special abilities, like the Cappy throw, to transform himself and interact with the environment. This generative model lets you create unique sentences or responses—a powerful tool in the Language Kingdom.

Level 4: The Final Boss Battle – Synthesizing & Presenting Your AI Creations

🏆 *Mission*: You've reached the showdown. It's time to showcase the creative outputs of your generative model in a way that's meaningful and insightful. Just as Mario must outsmart Bowser in the final battle, you'll need to present your AI's outputs in a clear, structured way that reveals the model's strengths, any interesting patterns, and potential uses. This is where you demonstrate not only coding skills but creativity and storytelling too.

Congratulations! You've Cleared the Language Level!

🎉 **Reward**: With the successful completion of this journey, you've proven your ability to master language patterns, build effective NLP pipelines, and generate fresh content. These skills are a valuable asset to our kingdom, bringing new capabilities to the world of data and AI. Well done, hero!

Your deadline: 2 weeks.

What to include:

1. Presentation analysis and result.

2. Source Code. You can use any tool, programming language or API, no need to build the model from scratch. The intention here is to evaluate whether you understand the sequence of processes in building the analysis or model, not the accuracy and also the advancement of the model.

3. Send the result to: info@maknadata.ai. Subject: [Name] [Test Case Result]