# Problem statement #1

### NOTE: Candidates ****MUST**** submit solution in the google form provided below.

### Your Challenge

You are provided with sample 100K raw, transaction-level data from the Aave V2 protocol. Each record corresponds to a wallet interacting with the protocol through actions such as deposit, borrow, repay, redeemunderlying, and liquidationcall.

Your task is to develop a robust machine learning model that assigns a **credit score between 0 and 1000** to each wallet, based solely on historical transaction behavior. Higher scores indicate reliable and responsible usage; lower scores reflect risky, bot-like, or exploitative behavior.

Decide which features to engineer from DeFi transaction data Implement a one-step script that generates wallet scores from a json file which contains the a small sample of user-transactions.

Validate and explain the score logic in a one-page README for transparency and extensibility.

### Link to the user-transactions json file:

The below file is raw json file (~87MB)

<https://drive.google.com/file/d/1ISFbAXxadMrt7Zl96rmzzZmEKZnyW7FS/view?usp=sharing>

Or if you prefer the compressed zip file (~10MB)

<https://drive.google.com/file/d/14ceBCLQ-BTcydDrFJauVA_PKAZ7VtDor/view?usp=sharing>

### Deliverables

* Github repo containing all the code written, with [readme.md](http://readme.md) and [analysis.md](http://analysis.md)
* Include readme file explaining the method chosen, complete architecture, processing flow.
* Create a new file called [analysis.md](http://analysis.md) and after scoring all the wallets add analysis on the wallets scored, include score distribution graph across the ranges from 0-100,100-200, etc. Behavior of wallets in the lower range, behavior of wallets in the higher range.

### Submission

<https://forms.gle/C7Y4MBKEGZgDWaNz7>