



# Treehouse Digital Assets Research Intern Coding Assessment

As a Research Analyst intern, you will be using DefiLlama and/or Dune Analytics to query blockchain data as part of analysis work. You are required to complete one of the two questions below:

- Question 1: Use Python to extract data from the DefiLlama API
- Question 2: Use SQL to query Dune Analytics

After familiarizing yourself with DefiLlama and the Dune Analytics platform, the assessment can be completed in less than an hour.

## Q1: Python Assessment

- Start by navigating DefiLlama ([API docs](#)) and familiarize yourself with its capabilities and API.
- Retrieve the top 10 blockchains by TVL (Total Value Locked)
- Retrieve the TVL change for the top 10 blockchains from 1 Jan to 30 Jun 2023
- Retrieve the top 10 protocols by TVL on the **Arbitrum Blockchain**
- Calculate annualized fee data (if available) for the top 10 Arbitrum protocols using the 30d fee data
- Present your data in a tabular format and comment on the insights that you have gained
- Submit your response together with your code in a .py or .ipynb file

## Q2: SQL Assessment

- Start by navigating Dune's platform and familiarize yourself with the relevant schema and data tables. Link to Dune Analytics: [Dashboards \(dune.com\)](https://dune.com)
- Use a query to find the wallet addresses that have **received** [CHILIZ tokens](#) within the last 24 hours. Present your query in the following fields:
  - Receiver wallet addresses
  - The timestamp of each transaction
  - Sort the most recent transfers on top
- Create another query to find the wallet addresses that have **traded** CHILIZ token on a Decentralized Exchange (DEXs) within the past 24 hours. Present your query in the following fields:
  - Initiating wallet address
  - The timestamp of each transaction
  - Sort the largest transactions on top.
- Title your query using **only your username** (E.g. "@DuneUsername").
- Comment on the insights that you have gained
- Submit your response through a URL link to Dune Analytics page

(End)