Cairo Crash Course

Basic Data Types - Exercise 3

In this exercises we will practice basic Cairo operations by performing some conversions with felts and integers.

Contract Implementation

In the `basic_types_exercises_3.cairo` file, complete the given functions according to the following instructions:

- `add_felt(value: (felt252, felt252)) -> felt252`: This function receives a tuple as a parameter, decouples is and return the sum of its values.
- `subtract_felt(x: felt252, y: felt252) -> u8`: Here, the function takes two felts. Perform the operation `x - y` and return the result as a `u8`. Note: You don't need to check the condition where y is greater than x.
- `multiply_felt(x: u32, y: felt252) -> u32`: Given a `u32` and a `felt252`, multiply the parameters and return the result as a `u32`.
- `divide_felt(x: u64, y: u64) -> felt252`: This function receives two `u64` values. Perform the division `x / y` and return the result as a `felt252`.

Checking the exercise

- Ensure your `.cairo` file compiles and the test passes by executing the command `snforge test basic_types_3`.
- You'll notice an additional test with the attribute `#[should_panic]`. This is for the case in the `subtract_felt` function where y is greater than x, handling the `('Option::unwrap failed.')` error. Don't worry; more testing details will be covered in later chapters. 😉

Useful links

Data Types and Operations