Literal expressions

Aliteral expression is an expression consisting of a single token, rather than a sequence of tokens, that immediately and directly denotes the value it evaluates to, rather than referring to it by name or some other evaluation rule. The supported literal expressions are described next.

Boolean literals

The two values of the <u>boolean</u> type are true and false . example let a = true; let b = false;

Numeric literals

Cairo supports the following numeric literals: 1. A decimal literal that consists of only decimal digits. 2. A hexadecimal literal that start with the character sequence0x and continues with hex digits. 3. A binary literal that start with the character sequence0b and continues with binary digits. A numeric literal may be followed (immediately, without any spaces) by an underscore character (_) and then aliteral suffix , which forcibly sets the type of the literal. The literal suffix is any valid identifier, but only selected values are semantically correct. Floating-point numbers are not supported. Examples of numeric literals of various forms: Literal Value Type 1234 1234 felt252 1234 felt252 1234 felt252 1234 u32 1234 i32 `1234 u128 1234 u128 0x4D2 1234 felt252 0b10011010010 1234 felt252 Examples of invalid numeric literals: * Invalid suffix: * 1234suffix * Use of digits of wrong base: * 123AFB43 * ,0b0102 * ,0o0581 * ,0xG * . * Binary and hexadecimal literals must have at least one digit: * 0b * ,0x_u128 Cairo syntax considers-1 as an application of the unary minus operator to the numeric literal1 , rather than a single numeric literal.

Short string literals

A short string is a ascii-string whose length is limited by the type that holds it. The default type is afelt252 which limits the length of the string to 31 characters. A short string literal may be followed by an underscore character (_) and then aliteral suffix just like a numerical literal. Examples of short string literals: * 'short_string' * 'short_string'_u128 * 'a'_u8 Note that a short-string is a way to encode a string as a numerical value, it is not a string type. Cairo doesn't have a string type at the moment. The short string's first character is the most significant byte of the integer (big endian representation).

7. Expressions 7.2 Path expressions