Solidity Variables Types

- Solidity is a programming language that is **statically-typed**, meaning that every variable type must be specified at compile time.

Simple types:

- Boolean variables
  - By default initialized with **false**
- Signed and Unsigned Integers of various sizes
  - int8 to int256, uint8 to uint256 in steps of 8
  - int8 is between -128 and +127, int16 is between -32768 and +32767 and so on
  - int is alias to int256 and uint is an alias to uint256
  - By default an int is initialized with **zero**
- There is no full support for float/double (fixed point numbers) in Solidity

Solidity Arrays

Arrays

1. **Fixed-size**
   - Has a compile-time fixed size
   - **bytes1, bytes2, …, bytes32**
   - **byte** is an alias for bytes1
   - Integer fixed-size arrays: **int8** to **int256** and **uint8** to **uint256**
   - **member: length**
2. **Dynamically sized arrays**
   - byte[ ]
   - byte[ ] is an alias to bytes
   - string (UTF-8 encoding)
   - uint[], int[ ]
   - members: length and push