

# Move 基礎語法 (上)

Justa from Bucket Protocol



**Bucket**

# 大綱

- 如何使用 Sui CLI
- 套件與模組
- 基本型別與陣列
- 標準函式庫
- 運算符
- 判斷式、迴圈、中斷

# Sui CLI

- `sui -V`
- `sui move new [name]`
- `sui move build`
- `sui move test`
- `sui client new-address`
- `sui keytool list`

# 套件與模組

```
package 0x...  
    module a  
        struct A1  
        fun hello_world()  
    module b  
        struct B1  
        fun hello_package()
```

# 專案架構

```
sources/  
    my_module.move  
    another_module.move  
    ...  
tests/  
    ...  
examples/  
    using_my_module.move  
Move.toml
```

# 基本型別

- bool
- unsigned integers
  - u8, u16, u64, u128, u256
- address
- vector<T>

# 運算符

Syntax	Operation	Aborts If
+	addition	Result is too large for the integer type
-	subtraction	Result is less than zero
*	multiplication	Result is too large for the integer type
%	modular division	The divisor is 0
/	truncating division	The divisor is 0

# 標準函式庫

Module	Description	Chapter
<code>std::string</code>	Provides basic string operations	String
<code>std::ascii</code>	Provides basic ASCII operations	String
<code>std::option</code>	Implements an <code>Option&lt;T&gt;</code>	Option
<code>std::vector</code>	Native operations on the vector type	Vector
<code>std::bcs</code>	Contains the <code>bcs::to_bytes()</code> function	BCS
<code>std::address</code>	Contains a single <code>address::length</code> function	Address
<code>std::type_name</code>	Allows runtime <i>type reflection</i>	Type Reflection
<code>std::hash</code>	Hashing functions: <code>sha2_256</code> and <code>sha3_256</code>	Cryptography and Hashing
<code>std::debug</code>	Contains debugging functions, which are available in only in test mode	Debugging



# 判斷式、迴圈、中斷

- `if` and `if-else` - making decisions on whether to execute a block of code
- `loop` and `while` loops - repeating a block of code
- `break` and `continue` statements - exiting a loop early
- `return` statement - exiting a function early