MIPS Assembly

Registers

General Purpose Registers (GPRs)

- 32 GPRs

The 0 constant

- The register `$zero` holds the constant value 0
- This register's value cannot be mutated

Register 1

- `$at` is reserved by the assembler
- any mutations will be overwritten

Registers 2 - 3

- `$v0 - v1$

syscall

- Performs a system operations based on value in `$v0`

Registers 4 - 7

- `$a0-a3`

Special Purpose Registers (SPRs)

Program Counter (PC)

- Points to latest instruction to be executed
- Goes in steps of 4
- This register cannot be accessed or mutated
- Branching & jumping operations can set the value to the PC indirectly

High Reg (Hi)

- To hold the results of multiplication / division operations

Low Reg (Lo)

- To hold the results of multiplication / division operations