

V2.0 Commands

Create Jump Command

Command Id: 0x0

Description:

Create a jump command with the given id. This command is used to create a jump command that can be used later.

Arguments:

Argument Index	Type	Name	Description
1	Integer	ID	Unique identifier for the jump command

Open Command

Command Id: 0x1

Description:

Open a file.

Arguments:

Argument Index	Type	Name	Description
1	String	Filename	The name of the file to open
2	Integer	Mode	The mode to open the file in (0 for read, 1 for write, 2 for both)

Argument Index	Type	Name	Description
3	Register	Result Register	The register to store the file descriptor

Create Ptr Command

Command Id: 0x2

Description:

Create a pointer to a memory location.

! Careful, this command will overwrite the r10 and r11 registers during execution !

Arguments:

Argument Index	Type	Name	Description
1	Integer	Size	Size of memory to allocate (must be between 1 and 4096 bytes)
2	Register	Result Register	Register to store the pointer

Read Command

Command Id: 0x3

Description:

Read from a file descriptor into a pointer.

Arguments:

Argument Index	Type	Name	Description
1	Integer	Size	The number of bytes to read
2	Register	File Descriptor Location	The register containing the file descriptor
3	Register	Buffer Location	The register containing the pointer to the buffer where the data will be read into

Set Value Command

Command Id: 0x5

Description:

Set a value in a register.

Arguments:

Argument Index	Type	Name	Description
1	Integer	Value	The value to set in the register
2	Register	Register	The register to store the value

Add Value Command

Command Id: 0x6

Description:

Add a value to a register.

Arguments:

Argument Index	Type	Name	Description
1	BigInt	Value	The value to add to the register
2	Register	Register	The register to add the value to

Add True Label Command

Command Id: 0x7

Description:

Add a label to jump to if a condition is true.

! Important: You need to have called the CreateJumpCommand before this command. !

Arguments:

Argument Index	Type	Name	Description
1	Integer	ID	The ID of the jump command

Add False Label Command

Command Id: 0x8

Description:

Add a label to jump to if a condition is false.

! Important: You need to have called the CreateJumpCommand before this command. !

Arguments:

Argument Index	Type	Name	Description
1	Integer	ID	The ID of the jump command

Compare Register Command

Command Id: 0x9

Description:

Jumps to a label depending on the comparison of two registers and a condition.

Arguments:

Argument Index	Type	Name	Description
1	Integer	ID	The ID of the jump command
2	Register	Register 1	First register for comparison
3	Register	Register 2	Second register for comparison
4	JumpCondition	Condition	The condition for the comparison

Set Loop Counter Command

Command Id: 0xA

Description:

Set the loop counter.

Arguments:

Argument Index	Type	Name	Description
1	Integer	Value	The value to set the loop counter to

Set Loop Counter From Register Command

Command Id: 0xAA

Description:

Set the loop counter.

Arguments:

Argument Index	Type	Name	Description
1	Register	Value	The register containing the value to set the loop counter to

XOR Value Command

Command Id: 0xB

Description:

XOR a value with a register.

Arguments:

Argument Index	Type	Name	Description
1	BigInt	Key	The value to XOR with the register

Argument Index	Type	Name	Description
2	Register	Register	The register to XOR with

XOR From Register Command

Command Id: 0xBB

Description:

XOR a register with a register.

Arguments:

Argument Index	Type	Name	Description
1	Register	Key	The register containing the key to XOR with
2	Register	Register	The register to XOR with

Create String Command

Command Id: 0xC

Description:

Create a string in the data section and loads it into a register.

Arguments:

Argument Index	Type	Name	Description
1	String	String	The string to create in the data section

Argument Index	Type	Name	Description
2	Register	Register	The register to load the string pointer into
3	Integer	ID	Unique identifier for the string

Load From Buffer Command

Command Id: 0xD

Description:

Load 8 bytes into a register.

Arguments:

Argument Index	Type	Name	Description
1	Register	Buffer Location	The register containing the buffer pointer
2	Integer	Offset	The offset in the buffer to read from
3	Register	Register	The register to load the value into

Iterate Loop Command

Command Id: 0xE

Description:

Iterate the loop with the given id.

Arguments:

Argument Index	Type	Name	Description
1	Integer	ID	The ID of the loop

Loop Start Command

Command Id: 0xF

Description:

Add a label to loop to.

Arguments:

Argument Index	Type	Name	Description
1	Integer	ID	Unique identifier for the loop

Print Command (WIP)

Command Id: 0x99

Description:

Print command. Currently prints only using the power of imagination.

Arguments:

Argument Index	Type	Name	Description
1	Register	Register	The register you want to eventually print

Argument Index	Type	Name	Description
			when the function will work, I guess