Fries 81 Cheat Sheet

Instruction Num	Binary	Instruction	Input1	Input2	Input3	Description
0	00000	BNK	N/A	N/A	N/A	do nothing
1	00001	SET	Registor (2bit)	Data (8bit)	N/A	Set registor value
2	00010	SWP	Registor 1 (2bit)	Registor 2 (2bit)	N/A	Swap registors values
3	00011	LET	Registor (2bit)	Memaddr (9bit)	N/A	Set memory equal to registor
4	00100	GET	Registor (2bit)	Memaddr (9bit)	N/A	Set registor equal to memory
5	00101	ADD	Registor 1 (2bit)	Registor 2 (2bit)	Registor 3 (2bit)	Add registors 1 and 2. Store value in registor 3
6	00110	SUB	Registor 1 (2bit)	Registor 2 (2bit)	Registor 3 (2bit)	Subtract registor 2 from 1. Store value in registor 3
7	00111	MUL	Registor 1 (2bit)	Registor 2 (2bit)	Registor 3 (2bit)	Multiply registors 1 and 2. Store value in registor 3
8	01000	DIV	Registor 1 (2bit)	Registor 2 (2bit)	Registor 3 (2bit)	Divide registor 2 from 1. Store value in registor 3
9	01001	INC	Registor (2bit)	N/A	N/A	Increment registor value by 1
10	01010	DNC	Registor (2bit)	N/A	N/A	Decrement registor value by 1
11	01011	AND	Registor 1 (2bit)	Registor 2 (2bit)	Registor 3 (2bit)	Preform "And" on registors 1 and 2. Store value in registor 3
12	01100	OOR	Registor 1 (2bit)	Registor 2 (2bit)	Registor 3 (2bit)	Preform "Or" on registors 1 and 2. Store value in registor 3
13	01101	NOT	Registor 1 (2bit)	Registor 2 (2bit)	N/A	Preform "Not" on registors 1. Store value in registor 2
14	01110	XOR	Registor 1 (2bit)	Registor 2 (2bit)	Registor 3 (2bit)	Preform "Xor" on registors 1 and 2. Store value in registor 3
15	01111	JMP	Line (11bit)	N/A	N/A	Jump to line in program
16	10000	CMP	Operator (3bit)	Registor 1 (2bit)	Registor 2 (2bit)	If condition is false skip the next line in program

17	10001	RED	Registor (2bit)	N/A	N/A	Read value from input pins and store in registor
18	10010	WRT	Registor (2bit)	N/A	N/A	Write value in registor to output pins
19	10011	SHD	N/A	N/A	N/A	shutdown system

Operator Num	Binary	Operator	Description
0	000	>	greater than
1	001	<	less than
2	010	==	equal to
3	011	>=	greater than or equal to
4	100	<=	less than or equal to
5	101	!=	not equal to

Registor Num	Binary	Registor Name
0	00	RA
1	01	RB
2	10	RC
3	11	RD