

	[1]			[2]			[3]		
[][1]	산술연산	ADD	OORR	산술연산	•	•	기타	SHL	OORR
[][2]			OORMD		MUL	OORMD		SHR	OORR
[][3]			OORMFA			OORMFA		RTL	OORR
[][4]		OORR	•		•	RTR		OORR	
[][5]		OORMD	DIV		OORMD	SHRA		OORR	
[][6]		OORMFA			OORMFA	•		•	•
[][7]	논리연산	OR	OORR	논리연산	AND	OORR	논리연산	XOR	OORR
[][8]			OORMD			OORMD			OORMD
[][9]			OORMFA			OORMFA			OORMFA
24-8=16									

OR / XOR : NOT & AND => http://en.wikipedia.org/wiki/NAND_logic
 RTL / RTR : ex) RTL 3 => (SHL 3) + (SHR 5)

	[4]			[5]			[6]		
[][1]	LOAD	DBOX	OORR	STORE	DBOX	OORR	cal/ret	JCALL	OORMFA
[][2]			OORMD			OORMD			OORMD
[][3]			OORMFA			OORMFA		JSUB	OORMFA
[][4]		HALF	OORR		HALF	OORR			OORMD
[][5]			OORMD			OORMD		RSUB	OORMFA
[][6]			OORMFA			OORMFA			OORMD
[][7]	CMP		OORR	JMP		OORR		CALL	OORMFA
[][8]			OORMFA			OORMD			OORMD
[][9]			OORMD			OORMFA		•	•
26-12=14									

LDH / STH : LD -> SHL 4 -> SHR 4
 JCALL / JRET : => CALL / RET
 JSUB / RSUB : => CALL / RET

[9][]	IMUL	92XX	OORMD	•	•	•
	IDIV	93XX	OORMD	DIV	986X	OOOR
	IMUL	94XX	OORMFA	MUL	993X	OOOR
	IDIV	95XX	OORMFA	NEG	984X	OOOR
	IMUL	994X	OOOR	NOT	985X	OOOR
	IDIV	995X	OOOR	SKIP3	990X	OOOR
	PUSH	988X	OOOR	JCALL	981X	OOOR
	POP	989X	OOOR	JRET	9998	OOOO
	JSUB	982X	OOOR	CALL	983X	OOOR
	RSUB	992X	OOOR	RET	9999	OOOO
19-9=10						

IMUL / IDIV : OOOR format
 SKIP3 : => JUMP NEAR 1

#	Label	mnemonic		Comment
		OPCode	Address	
		ORG	0	
0	TABLE	RESDBOX	10	int table[10]
10	MARK	DBOX	. = '*'	char mark = '*'
12	IVAL	RESDBOX	1	int i
14	JVAL	RESDBOX	1	int j
16	CVAL	RESDBOX	1	int c
18	TOTAL	RESDBOX	1	int total
20		CALL	MAIN	
23		COB		
24		RESDBOX	7	
31	MAIN	PUSH	C	원래 있던 레지스터 값을 백업
34		PUSH	B	"
37		PUSH	A	"
40		MOV	B, #9	
43		MOV	C, #10	
46	IPT_LOOP	JLOOP	IPT_END	
49		IN	A	table[i] = short
52		SHR	A, #4	DBOX to BOX
55		SHL	A, #4	ex) 1234:5600 => 0000:5600
58		PUSH	X	
61		MOV	X, B	
64		SUB	X, C	
67		MUL	X, #2	
70		MOV	TABLE+X, A	Table[i] = getc(stdin)
73		POP	X	
76		JUMP	IPT_LOOP	
79	IPT_END	MOV	IVAL, #0	i = 0
82		SHL	IVAL, #1	i x 2
85		MOV	CVAL, TOTAL+IVAL	C = Table[i]
88		SHR	IVAL, #1	i / 2
91		MOV	C, #10	while(i<10
94	OPT_LOOP	JLOOP	OPT_END	&&C>0)
97		JZ	C, OPT_END	
100		ADD	TOTAL, C	total+=c
103		MOV	A, B-C	
106		OUT	12	
109		MOV	A, ':'	
112		PUSH	C	
115		MOV	C, CVAL	
118	PRNT_STAR	JLOOP	PRNT_END	
121		MOV	A, MARK	
124		JUMP	PRNT_STAR	
127	PRNT_END	POP	C	

#	Label	mnemonic		Comment
		OPCode	Address	
124		MOV	A, #10	
127		OUT	12	printf('\n')
130		ADD	IVAL, #1	
133		MOV	CVAL, TOTAL+IVAL	
136		JUMP	OPT_LOOP	
118	OPT_END	DBOX	T	
121		DBOX	o	
124		DBOX	t	
127		DBOX	a	
130		DBOX	l	
133		DBOX	:	
136		DBOX	0	
139		BLK.SZ	6	
142		ST.CW	OPT_END, 12	
145		MOV	A, TOTAL	
148		OUT	12	
151		MOV	A, #10	
154		OUT	12	
157		RET		

* 세그멘테이션 오류로 수정 중에 있습니다. 연장제출기간 내에 수정해서 가상강의실에 올리도록 하겠습니다.