

#Mem Addr	#Machine Code	#Branch/Call Target	#Mnemonic	#Comment
				Assemble Instructions
				<b>Bubblesort</b>
				##### Register use #####
		#define	P11 r0	P1 Einer
		#define	P12 r1	P1 Zehner
		#define	P21 r2	P2 Einer
		#define	P22 r3	P2 Zehner
		#define	P31 r4	P3 Einer
		#define	P32 r5	P3 Zehner
		#define	P41 r6	P4 Einer
		#define	P42 r7	P4 Zehner
		#define	TASTE r9	
				##### Program #####
0x00	F08	Beginn	CLEAR	
0x01	F60		DISP #6,r0	
0x02	B3D	Füllen	CALL Würfel	
0x03	0D0		MOV rD,r0	
0x04	B3D		CALL Würfel	
0x05	0D1		MOV rD,r1	
0x06	B3D		CALL Würfel	
0x07	0D2		MOV rD,r2	
0x08	B3D		CALL Würfel	
0x09	0D3		MOV rD,r3	
0x0A	B3D		CALL Würfel	
0x0B	0D4		MOV rD,r4	
0x0C	B3D		CALL Würfel	
0x0D	0D5		MOV rD,r5	
0x0E	B3D		CALL Würfel	
0x0F	0D6		MOV rD,r6	
0x10	B3D		CALL Würfel	
0x11	0D7		MOV rD,r7	
0x12	FF9		KIN TASTE	
0x13	B18		CALL Sortiere	
0x14	B18		CALL Sortiere	
0x15	B18		CALL Sortiere	
0x16	FF9		KIN TASTE	
0x17	C00		GOTO Beginn	
				##### Subroutines #####
0x18	813	Sortiere	CMP P12,P22	
0x19	E22		BRZ hier1	
0x1A	D24		BRC next2	
0x1B	00E	tauschel	MOV r0,rE	
0x1C	020		MOV r2,r0	
0x1D	0E2		MOV rE,r2	
0x1E	01E		MOV r1,rE	
0x1F	031		MOV r3,r1	
0x20	0E3		MOV rE,r3	
0x21	C24		GOTO next2	
0x22	820	hier1	CMP P21,P11	

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0x23	D1B		BRC tauschel	
0x24	835	next2	CMP P22,P32	
0x25	E2E		BRZ hier2	
0x26	D30		BRC next3	
0x27	02E	tauschel2	MOV r2,rE	
0x28	042		MOV r4,r2	
0x29	0E4		MOV rE,r4	
0x2A	03E		MOV r3,rE	
0x2B	053		MOV r5,r3	
0x2C	0E5		MOV rE,r5	
0x2D	C30		GOTO next3	
0x2E	842	hier2	CMP P31,P21	
0x2F	D27		BRC tauschel2	
0x30	857	next3	CMP P32,P42	
0x31	E3A		BRZ hier3	
0x32	D3C		BRC fertig	
0x33	04E	tauschel3	MOV r4,rE	
0x34	064		MOV r6,r4	
0x35	0E6		MOV rE,r6	
0x36	05E		MOV r5,rE	
0x37	075		MOV r7,r5	
0x38	0E7		MOV rE,r7	
0x39	C3C		GOTO fertig	
0x3A	864	hier3	CMP P41,P31	
0x3B	D33		BRC tauschel3	
0x3C	F07	fertig	RET	
0x3D	F05	Würfel	RND	
0x3E	99D		CMPI #9,rD	
0x3F	D3D		BRC Würfel	
0x40	F07		RET	