

A2 Batch Macro Processor

Implement a macro-processor which expands the macro invocations by substituting the macro's definition. Create tables like NAMTAB, DEFTAB and ARGTAB. Call Assembler function in turn to produce the object codes by creating all relevant tables.

Modify the algorithm to implement Independent feature:
Concatenation of Parameters

Input:

COPY	START	2000
ALPHA	WORD	5
BETA	WORD	10
GAMMA	RESW	1
TEN	WORD	10
DELTA	RESW	1
XA1	WORD	2
XA2	WORD	3
XA3	RESW	1
ADDS	MACRO	&ID
	LDA	ALPHA
	ADD	BETA
	ADD	X&ID-> 1
	ADD	X&ID-> 2
	STA	X&ID-> 3
	MEND	
ADDX	MACRO	
	LDA	BETA
	ADD	GAMMA
	ADD	TEN
	STA	DELTA
	MEND	
. Main Program		
FIRST	STL	RETADR
	LDA	LENGTH
	ADDS	A
	LDA	ALPHA
	ADD	FIVE
	STA	ALPHA
	ADDX	
RETADR	RESW	1
LENGTH	WORD	100
FIVE	WORD	FIVE
	END	FIRST