Practical no: 4

Problem Statement: Write a Java program for pass-II of a two-pass macro-processor. The output of assignment-3 (MNT, MDT and file without any macro definitions) should be input for this assignment.

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	Spos T.E. Comp. Div: A Assignment A-4 Rollno: 02
	Aim: Design of a MACRO PASS-II
	Problem Statement: Write a Java program for pass-II of a two-pass macroprocessor. The
	olp of assignment-III should be ilp for this practice
	Theory: Pass - T Macro Definition
Q	This sat at muse
	1) Initialize MATC and MNTC with value one, so that
-114	previous value of MDTC 4MPTC is set to value one.
	2) Read the first input data.
	3) If this data contains MACRO pseudo opcode then.
	1. Read the next data ilp.
	2. Enter the name of macro & current value of MDTC in MNT.
	3. Increase the counter value of MNT by value one
0	4. Prepare that argument list array respective to the
25 1124	5. Enter the macro definition into MOT. Increase the counter of MOT by value one
	6. Read next line of the input data
Almos	7. Substitute the index notations for dummy
	arguments passed in Macro.
	8. Increase the counter of MDT by value one.
46.	9. If send pseudo opcode is incountered then next source of input data is read.
	10. Else expands data ip.
74	4) If macro pseudo opcode is not encountered in data input then,
	101por trietti,

	32.3.72
	1. A copy of ilp data is created.
1.00	2. If end psaudo opcode is found then go to pass-II 3. Otherwise read next source of i/p. data.
4	THE PROPERTY OF THE PARTY OF THE PARTY.
Caller Co	Pass-II Maco calls & Expansion
	BRead the ip data received from Pass-I
	2) Examine each operation code for finding resp.
10.11	3] If the strame of macro is encountered then,
s at	1. 17 pointer is set to MNT entry where have of macro
	is found. This pointer is called Maco Definition Table
4.1	Pointer (MOTP) was spiritaged about 11 inter
	2. Prepare argument list array containing a table of
	dummy arguments
	3. Increase the value of MDTP by value one.
1/16	1. Read pext line from MOT
	5. Substitute the values from the arguments list of
	6. If mend pseudo opcode is found then next source of i/p data is Read.
	7. Else expands data input.
	4) When macro name is not found then create expanded
18	data file.
18	5) If end pseudo opcode for encountered then feed the
1, 3	expanded source file to Assembler for processing
	6) Else read next source of datainput.

	Input: 7/10 - windies .	1	17 171	
	INPUT	EΛ	21.W.II	
	MACRO			
	INCRI 4 FIRST, 4 SEWND =	PATAG	A	_
	A 1,4 FIRST	, #± <u>, 1</u>		
	L 2,48ECOND		MET.	_
	MEND MACROTTHE TOPHE	,127A Y	4	_
	INCR2 & ARGI, &ARG2 = DA	TA5	NUNI	_
	L 3,4ARG1		2	
	ST 4,4ARG2	0分.是		
	MEND	111,7	1,1	
	PRG2 START		Les To tes	
	USING *, BASE		1	
	INCRI DATAI			
	INCREDATAS, DATAS		# 1 ca	_
	FOUR DC F'4'			_
	FIVE DC F's" MON ONOUS			_
-	BASE EQU 8	U-A	NUVE	_
	TEMP DS IF			_
	DROP 8	241.1	1	
	END	157.5		_
			P(-14)	
	ООТРОТ			_
	-Pass I			_
	ALA:		-7.5	
	C 4 FIRST, 4 SECONDI.			_
	[FARGI. SARGE]			_
	10.03.1			_
	MNT:			_
	CINCRI, O)			_
	[INCR2, 4].	7.7		

MAT:	4FIRS	T, & SECOND = DAT
INCR	Ag	0.474
		34 (4.98)
A	1, #0	SECTION SECTION
L	2,#1	Transfer and A
MEN		(Mar. 2) - 2
۵	& ARGI	4 ARG2 = DATA5
INCR	241	MARK BANDAR MARKET ASSIS
2		1-112/04 1
i	3,#0	1. Paril 4 . F 1. P. II.
ST	4,#1	
MEN		TOVITY OF SELECT
D		4744.* 477.23
		10.0.110.141
- PASS-2	_	PARAMETER STATE
1-0.55		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
MOT:	& FIRST, &:	SECOND = DAT
INCR	A-9	9 1932 12344
1		<u> </u>
A	1,#0	2 (1)
1	2,#1	17-1
-		
MEN		2 (2.1.1
		5 - N - 2 - 1 - 1 - 1 - 1
PRG2	STAR	(5.4.1.2)
PJKG2	Т	*, BASE
	USING	<u>La pirala de la la</u>
	G -A	LOATAL
	L	2, DATA9
	L	3, DATA3

11.15	Committee the real relationship as the	
	FOUR DC F'4'	
1 1.35	FIVE DC F'5'	
	BASE EQU & AVE	
S	TEMP DS William IF Daniel His	Ç
	DR0 8	
	the mile of the part of the same of the sa	
	END	
	ALA:	
	[DATAI, DATA9]	
	CDATA3, DATA4)	
	Franki - Franki	
	Conclusion:	
	Thus, pass I of Macro processor of is implemented &	
	ALA file is generated.	
	0	
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