

Problem statement : Apply PassI of a two pass Macro Pre-processor to the following Macro Definitions and generate MNT, MDT, KPDTAB. Show the contents of PNTAB for each Macro Definition.

```
MACRO
INCR      &MEM_VAL, &INCR_VAL, &REG
MOVER     &REG, &MEM_VAL
ADD       &REG, &INCR_VAL
MOVEM     &REG, &MEM_VAL
MEND
```

```
MACRO
INCR_M    &MEM_VAL=, &INCR_VAL=, &REG=
MOVER     &REG, &MEM_VAL
ADD       &REG, &INCR_VAL
MOVEM     &REG, &MEM_VAL
MEND
```

```
MACRO
INCR_D    &MEM_VAL=, &INCR_VAL=, &REG=AREG
MOVER     &REG, &MEM_VAL
ADD       &REG, &INCR_VAL
MOVEM     &REG, &MEM_VAL
MEND
```

Solution

MNT

MNT Index	Name of Macro	#PP	#KP	MDTP	KPDTP
1	INCR	3	0	1	-----
2	INCR_M	0	3	5	1
3	INCR_D	0	3	9	4

KPDTAB

1	MEM_VAL	-----
2	INCR_VAL	-----
3	REG	-----
4	MEM_VAL	-----
5	INCR_VAL	-----
6	REG	AREG

MDT

MDT		PNTAB for INCR Macro	
1	MOVER (P,3), (P,1)	1	MEM_VAL
2	ADD (P,3), (P,2)	2	INCR_VAL
3	MOVEM (P,3), (P,1)	3	REG
4	MEND	PNTAB for INCR_M Macro	
5	MOVER (P,3), (P,1)	1	MEM_VAL
6	ADD (P,3), (P,2)	2	INCR_VAL
7	MOVEM (P,3), (P,1)	3	REG
8	MEND	PNTAB for INCR_D Macro	
9	MOVER (P,3), (P,1)	1	MEM_VAL
10	ADD (P,3), (P,2)	2	INCR_VAL
11	MOVEM (P,3), (P,1)	3	REG
12	MEND		