

## MDA 8086

1. Add the following code at the start of each program : ORG 1000H
2. Replace HLT by INT 3 at the end of the code.
3. Baudrate : 9600
4. Flow Controll : None.
5. Double click MASM.exe then give just file with no extension. Then keyboard Enter and Enter. Then .OBJ file will be created. If not created then there must be an error in the code. Use LOD186.exe to generate the .ABS extension file. To do that double click LOD186.exe then give just the file name and Enter and Enter. If the .OBJ file is not created then there must be something wrong with your code that's why MASM could not compile that. In that case run MASM from command prompt. Here compile the .asm file again and you will find that there some severe errors in the description. You can also find the error description just above that. In that error description the line number where error occurred is given in bracket. Thus you can find out where error occurred and can guess why occurred.
6. To come to the Hyperterminal command prompt press the reset button in the KIT.
7. Use Hyperterminal just as before. Here CS : 0000H and IP : 1000H.
8. See the following example to find out the changes in code for MDA.
9. Press L as before to load the .ABS file. Then after loading, the cursor will blink somewhere. Now press the reset button above the keypad in the KIT. Now the cursor will be back in the command prompt of hyper terminal.

See the corrected code of Example-1 of experiment-5 for MDA 8086.

### Example 1 : of Expt : 5

```
CODE SEGMENT
    ASSUME CS: CODE , DS: CODE
; sets up an array of 10 words , with each initialized by 9
; Here we shall copy W to Z and set W[N] = 0 for N = 0 to 9
    ORG 1000H ; this correction for MDA
    MOV CX , 10
    MOV DI , 0 ; N = 0
Zero:
    MOV AX , [W + DI]
    MOV [Z + DI] , AX
    MOV [W + DI] , 0; W[N] = 0
    ADD DI , 2; N = N + 1
    DEC CX
    JNZ Zero
    INT 3 ; HLT for MTS .

    ORG 1100H ; 100H for MTS.
W DW 10 DUP (9) ; Creates an array of 10 words initialized by 9 each
; Note: DUP came for duplicate.
Z DW 10 DUP (?) ; Creates an array of 10 uninitialized words
CODE ENDS
END
```

Correction  
For MDA

Correction  
For MDA

Correction  
For MDA

Correction  
For both MDA and  
MTS

### In Example 5 of Expt 5:

ENCRYPT DB 65 DUP ( ' '), 'XQPOGHZBCADEIJUVFMNKLIRSTWY' ; one space in the bracket  
DB 37 DUP ( ' ') ; Think ! why the 65 blank spaces placed first.  
; ALPHABET 'ABCDEFGHIJKLMN~~OP~~QRSTUVWXYZ'  
DECRYPT DB 65 DUP ( ' '), 'JHIKLQEFMNTURSDCBVWXOPYAZG'  
DB 37 DUP ( ' ')

There will be a space  
inside the colon inside  
the bracket.