***AIDS MICROPROCESSOR LAB S21 BATCH (2023-24)***

***Experiment 12 Title: Assembly language programming to calculate the cube of given number using macro.***

***Name of student: Meet Raut Class Roll Number: 2201084***

***Date of Performance: 01/04/2024***

***Batch: S2-1 Timing: 3:00-5:00 Date of Submission: -01/04/2024***

***Assembly language code***

*DATA\_SEG SEGMENT*

*number DW 5 #Variable to store the number*

*result DW ? #Variable to store the result*

*DATA\_SEG ENDS*

*CODE\_SEG SEGMENT*

*ASSUME CS:CODE\_SEG, DS:DATA\_SEG*

*cube\_macro MACRO #Define a macro to calculate the square of a number*

*MOV AX,number #Copy contents of number into AX register*

*MOV BX,number #Copy contents of number into BX register*

*MUL AX #Multiply AX by itself (square)*

*MUL BX*

*ENDM*

*START:*

*MOV AX,DATA\_SEG #Initialize the data segment*

*MOV DS,AX*

*cube\_macro #Call the macro*

*MOV result,AX #Store the result*

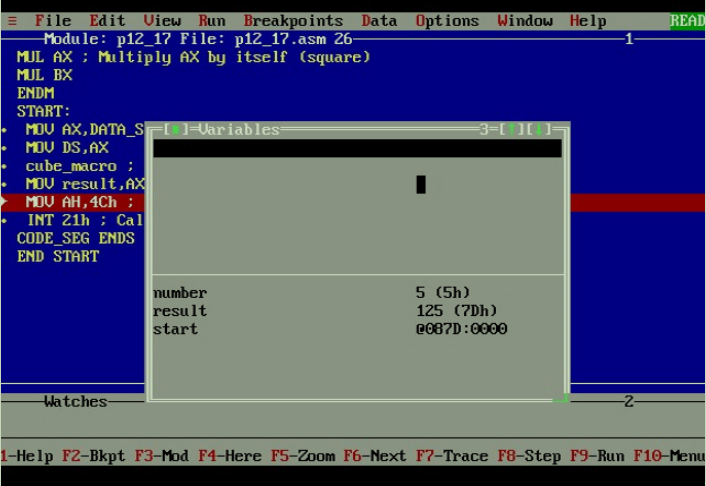
*MOV AH,4Ch #Exit to DOS*

*INT 21h # Call DOS interrupt*

*CODE\_SEG ENDS*

*END START*

*Result:*

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*CONCLUSION: LO 2, LO 3 mapped.*

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