// This is a program to find whether a given number is prime or not

// Try yourself with the program which checks the condition “Neither Prime Nor Composite” too

PRINT MACRO ARGS

 MOV DX,OFFSET ARGS

 MOV AX,0900H

 INT 21H

 ENDM

DATA SEGMENT

 MSG1 DB 0DH, 0AH,"ENTER A NUMBER TO BE CHECKED WHETHER IT IS PRIME OR NOT:$"

 MSG2 DB 0DH, 0AH,"THE NUMBER IS PRIME $"

 MSG3 DB 0DH, 0AH,"THE NUMBER IS NOT PRIME $"

 N1 DW 00H

DATA ENDS

CODE SEGMENT

 ASSUME CS:CODE,DS:DATA

 START:MOV AX,DATA

 MOV DS,AX

 PRINT MSG1

 CALL READ

 MOV BX, 0001H

 GO:MOV AX,CX

 INC BL

 DIV BL

 CMP AH,00H

 JNZ L1

 INC N1

 L1:CMP BX,CX

 JNZ GO

 CMP N1,01H

 JG L3

 PRINT MSG2

 JMP EXIT

 L3:PRINT MSG3

 EXIT: MOV AH,4CH

 INT 21H

CODE ENDS

END START