**;Write a program to add ten 16-bit numbers stored in memory and store and display the result in decimal format.**

**TITLE SUM 10 15 BIT NUMBER FORM MEMORY**

**.MODEL SMALL**

**.DATA**

**NUMS DW 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000**

**SUMS DW ?**

**.STACK**

**.CODE**

**MAIN PROC FAR**

**MOV AX, @DATA**

**MOV DS, AX**

**;; CALCULATING THE SUM**

**MOV CX, 10**

**LEA BX, NUMS**

**MOV AX, 00**

**L2: ADD AX, [BX]**

**INC BX**

**INC BX**

**LOOP L2**

**MOV SUMS, AX**

**;; CONVERTING TO DECIMAL**

**MOV CX, 00**

**MOV BX, 10**

**L3: MOV DX, 00**

**INC CX**

**DIV BX**

**CMP AX, 00**

**PUSH DX**

**JG L3**

**;; PRINTING IN DECIMAL**

**DIS: POP DX**

**OR DX, 30H**

**MOV AH, 02H**

**INT 21H**

**LOOP DIS**

**;; ENDING PROGRAM**

**MOV AH, 4CH**

**INT 21H**

**MAIN ENDP**

**END MAIN**