**ACTIVITY 1 SOLVED**

**Activity 1: Make memory of the following data on your paper and debug the program. Verify your output on AFD.**

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| **Activity 1:**  [org 0x0100]  mov al, [num1] ;load num 1 in ax  mov [num1+6], ax ;write data from ax in number 4  mov ax, [num1+1] ;load num 2 in ax  add [num1+5], al ;add 2 numbers  mov ax, [num1+4] ;load num 3 in ax  add [num1+6], ah ;add 2 numbers  mov ax, 0x4c00 ;terminate the program  int 0x21  num1: dw 0xabcd, 0x1234, 0x279A, 0 |

**Memory Configuration after Execution:**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Memory Address** | **Num1+0** | **+1** | **+2** | **3** | **4** | **5** | **6** | **7** | **8** |
| **Memory Content before execution from DS : 0119** | CD | AB | 34 | 12 | 9A | 27 | 00 | 00 | 00 |
| **Memory Address** | **+9** | **+A** | **+B** | **C** | **D** | **E** | **F** |  |  |
| **Memory Content**  **After execution from DS : 0119** | CD | AB | 34 | 12 | 9A | D2 | 9F | 00 | 00 |