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| https://upload.wikimedia.org/wikipedia/commons/thumb/4/4e/VU_Logo.png/260px-VU_Logo.png | Computer Architecture and Assembly Language Programming (CS401)  Assignment No. 1 | Total marks = 20  Deadline Date:  May 02, 2025 |
| Please carefully read the following instructions before attempting assignment.  RULES FOR MARKING  It should be clear that your assignment would not get any credit if:   * The assignment is submitted after the due date. * The submitted assignment does not open or file is corrupt. * Strict action will be taken if submitted solution is copied from any other student or from the internet.   You should concern the recommended books to clarify your concepts as handouts are not sufficient.  You are supposed to submit your assignment in .doc or docx format.  Any other formats like scan images, PDF, zip, rar, ppt and bmp etc. will not be accepted.  Lectures covered: 1-09  Topics covered: Data Declaration and Direct Addressing, Indirect Addressing, Branching, Unconditional jumps and relative addressing | | |
| NOTE  No assignment will be accepted *after the due date via email in any case* (whether it is the case of load shedding or internet malfunctioning). Hence refrain from uploading assignment in the last hour of the deadline. It is recommended to upload your solution file at least two days before its closing date.  If you find any mistake or confusion in the assignment (Question statement), please contact your instructor before the deadline. After the deadline, no queries will be entertained in this regard.  For any query, feel free to email at [cs401@vu.edu.pk](mailto:cs401@vu.edu.pk) | | |

**Problem statement:**

You are required to write an assembly language program to perform the following tasks:

1. Store the numeric part of your VUID in an array of numbers in memory.
2. Compute the sum of all the digits in your VUID and store it in memory.
3. Subtract each numeric digit of your VUID from the sum of all digits (computed in part b) and store it in a 2nd array.

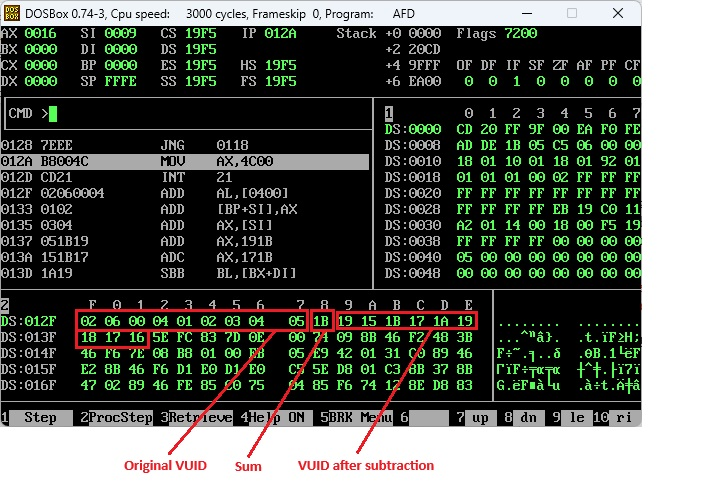
Note: You must use **your own VUID**. For example, if your VUID is BC260412345, the numeric part will be 260412345. Otherwise, zero marks will be awarded.

**Submission details:**

Following are required in a single MS-Word document.

1. Assembly language program.
2. Screenshot showing the results.

**Sample screenshot:**

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