

COA Lab [CS39001]

Assignment-5

August 6, 2024

You have to write MIPS programs for the following tasks:

1. Reverse of a string using stack. Example : Input: hello , Output: olleh
2. Populate a 2-D matrix such that each element of the matrix is $(-1)^{i+j} a^i * b^j$, where i and j are row and column indices of the matrix and we take a and b as input. Example:

Input:

- Number of rows: 3
- Number of columns: 3
- a: 2
- b: 3

Output:

$$\begin{bmatrix} 1 & -3 & 9 \\ -2 & 6 & -18 \\ 4 & -12 & 36 \end{bmatrix}$$

3. Compute the transpose of this matrix and print.