SSN College of Engineering Department of Computer Science and Engineering III year - UCS1512 – Microprocessors Lab

Academic Year: 2022 -2023 Batch: 2020-2024

Semester: V

Experiment No. 5: Matrix operations

5 a) Matrix addition

Input: 2 matrices stored in memory (8-bit elements - in row major order), Size of matrices (row1,

column1, row2, column2).

Output: Sum of matrices.

Hints:

Perform the addition only if row1=row2 and column1=column2, else exit.

5 b) Matrix subtraction

Input: 2 matrices stored in memory (8-bit elements - in row major order), Size of matrices (row1,

column1, row2, column2).

Output: Difference of matrices.

Hints:

Perform the subtraction only if row1=row2 and column1=column2, else exit.

No need to take the 2's complement if the difference is negative.