

Computer Science and Engineering Department, SVNIT, Surat
M.Tech.-I DS, Semester-1
Foundation of Data Science (CSDS111)
Lab Assignment: 2

Matrix and Vector Operations (Without using built-in functions):

1. Create arrays of one 1D with 20 numbers and one 2D of 10 x 10. Assign random numbers between 1 to 100 to the matrix.
2. Display the total number of elements in both arrays.
3. Sort the numbers in ascending order for both arrays.
4. Perform all arithmetic and statistical operations. Display the results. (Operations should include: min, max, count, sum, mean, median, mode, variance, standard deviation)
5. Perform the above operations for column wise for 2D array.