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

Academic Year: 2020-2021   Batch: 2018-2022
Semester: V

Experiment No 3: String Manipulations

3 a) Moving a string of bytes

Inputs: A source string, size of the source string (No. of bytes in the string), starting location of the source string and destination location
Output: A string of given size should be copied from source location to destination location.

Hint:
Instructions to be used:
REP MOVSB

3 b) Comparing 2 strings of bytes

Inputs: 2 strings of same size: string1 and string 2, size of the strings, starting locations of string1 and string2.
Output: A byte in memory location which gives zero if the strings are equal else the index of first mismatch.

Hint:
Instructions to be used:
REPE CMPSB

3 c) Searching a byte in a string

Inputs: A string, size of the string, starting location of the string and a byte to be searched.
Output: A byte in memory location which gives zero if the given byte is not found in the string else its index of first occurrence.

Hint:
Instructions to be used:
REPNE SCASB

3 d) Moving a string without using string instructions

Inputs: A source string, size of the source string, starting location of the source string and destination location

Output: A string of given size should be copied from source location to destination location without using string instructions.