

Result:- Assembly program to perform searching has been implemented successfully using 8086 emulator.

EXPERIMENT NO:-12

PALINDROME

Aim:- To write an assembly program to check if a string is palindrome or not using 8086 emulator.

Theory:- A string is said to be palindrome if the reverse of the string is same as that of the string. We would be writing an assembly program with input BLOCK 1 with string 'MALAYALAM' and display message accordingly whether or not it is a palindrome.

Algorithm:-

- Step 0:- Start the program.
- Step 1:- Define DS set BLOCK1, MSG1, MSG2.
- Step 2:- Print message word.
- Step 3:- Initialise the extra segment create a block to store the reverse.
- Step 4:- Initialise code segment, extra segment, data segment.
- Step 5:- Set the counter to loop the word.
- Step 6:- Clear direction LODSB, SET direction STOSB until count.
- Step 7:- Initialise SI, DI & set CX, 0009.
- Step 8:- Check the string by using REPZ CMPSB.
- Step 9:- If JNZ skip
- Step 10:- Print msg2.
- Step 11:- If not JNZ, print msg1.

Teacher's Signature _____

Step 12:- Stop the program.

Result:- Assembly program to check whether the input string is palindrome or not has been successfully implemented using 8086 emulator.