Department of Computer Science and Engineering
National Institute of Technology Calicut

CS2093D HARDWARE LABORATORY

<u>ASSIGNMENT 3</u>

Write an assembly language program:

1. To perform binary search in an n sized array.
2. To perform Insertion Sort in an n sized array.
3. Sort the elements in an array according to its frequency
   Sample Input : 2 5 3 2 4 3 4 1 6 4 Output : 4 4 4 3 3 2 2 6 5 1
4. To print the frequency of all elements in an n sized array
   Sample Input : 1 2 3 3 2 4 3 Output : 1 2 3 3 2 1 3
5. To print all prime numbers in an n sized array.
6. To enter two numbers 'a' and 'b' and print all the numbers in an n sized array which are divisible by both 'a' and 'b'.
7. To find sum of two mXn matrices.
8. To find the transpose of an mXn matrix.
9. To perform matrix multiplication.