<u>Department of Information Technology</u> <u>IIEST, Shibpur Howrah-3</u>

Computer Graphics Lab

Assignment 1: Warm-up Experiments

- 1. Compare two given strings and output 0 if they are same and 1 otherwise.
- 2. Write a program that accepts an integer and generates all possible prime factors of the number.
- 3. Write a program which will find G.C.D. of two given numbers.
- 4. Write a program that outputs the size of void pointer, integer pointer, char pointer and float pointer.
- 5. Allocate a block of memory for any string. Typecast that block as a block for integers. Show the values of integers and explain.
- 6. Write a program that can sort integers as well as floating point numbers. Show its utility by calling the function from two different programs.
- 7. Write a C function to reverse a substring within the main string. Pointers to the main string and the sub-string are passed as arguments to this function.
- 8. Define self-referential structure for representing a simple linked list of integers. Write a program to split the list into two sub-lists so that the first sub-list contains odd numbered elements and the second one contains the even numbered elements. For example, if the original list is {2, 8, 1, 14, 6, 18,0, 17}, then the first sub-list is {2, 1, 6, 0} and the second is {8, 14, 18, 17}