**Assignment III**

1. a)Write the kernel function which taken N number of Binary values as input. It converts these values into their corresponding decimal values and stores the result in another array in parallel. Specify the global work size.

b) How can you find out the execution time taken by kernel function. Specify all the statements required for this.

1. a) Write the kernel function which takes an integer array as input and it modifies that array by swapping alternative elements in that array in parallel. Specify the global work size.

b) Write all the statements that are associated with buffer for the above kernel.

3) Explain workgroup and work item concepts by taking the example of a vector of 16 workgroups and 32 workitems in each workgroup.

4) a) Write the kernel function which takes N number of binary values as inputs and stores the one’s complement of each element in another array in parallel. Specify the global work size.

b)Write all the statements that need to be executed before giving the commands to the command queue.

5) a) With an example explain how dynamic scheduling helps to reduce the stalls?

b) What is imprecise exception? List the 2 possibilities due to which Imprecise exceptions can occur.