**Data Mining-Report on Homework 3**

**Homework Group 33**

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Introduction

In this homework our group has implemented the BASE and IMPROVED algorithms of paper ***“TRIÈST: Counting Local and Global Triangles in Fully-Dynamic Streams with Fixed Memory Size”***.

The two algorithms both work on insertion-only streams.

**⑴*TRIÈST-BASE*** uses standard reservoir sampling to maintain the edge sample S, counts the global and local triangles of the sample, and estimates the global and local triangles with a coefficient .

**⑵*TRIÈST-*** ***IMPROVED*** is a variant of *TRIÈST-BASE* with small modifications that result in higher-quality (i.e., lower variance) estimations.