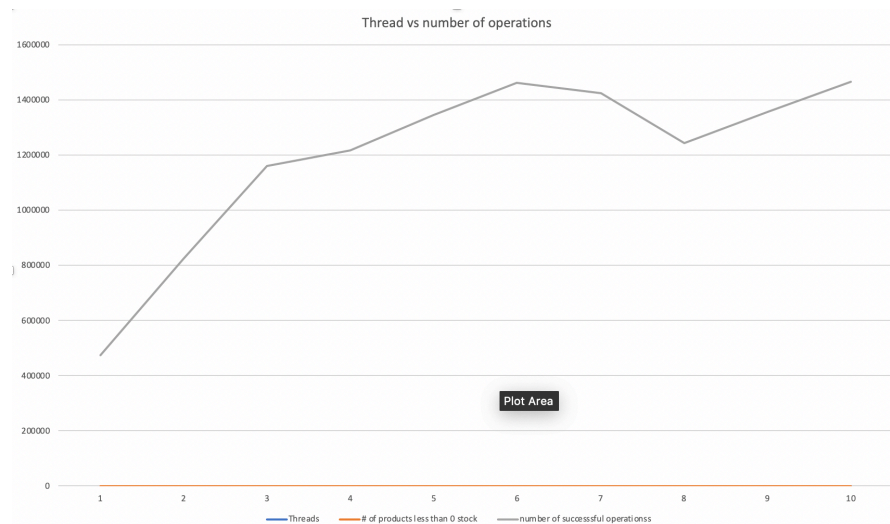


## Topics in Data management

### Assignment 1:

Name Pratik Bhagwat.

The plot below shows the relationship between Number of Threads, Number of successful operations and percent of products having stock less than 0.



The number of products having stocks less than 0 will always remain greater than or equal to 0 as the stock field in the products table is **unsigned int**. Moreover the submit order operation is atomic.

It is intuitive that as the number of threads increase the number of operations will also increase however there is an anomaly when the number of threads are 8 as we can see in the above plot. Initially the number of operations increase rapidly as the number of threads increase but later the plot seems to flatten out. This may be because of large number of unsuccessful placement of orders.