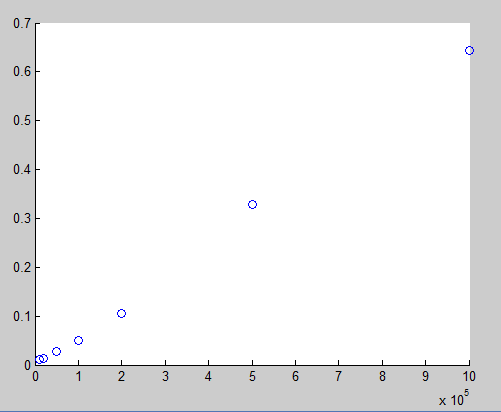
**Performance graphs**

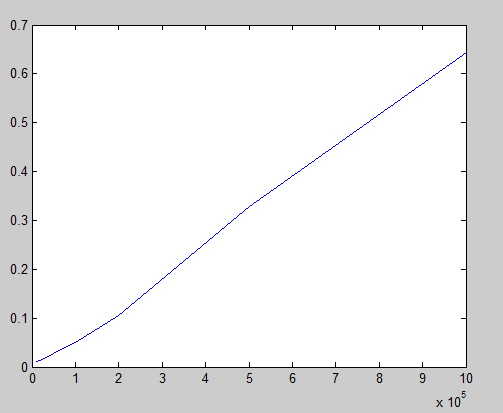
**MPI:**

**1. For 2 node cluster:**

**In all graphs Data varies from 10K to 1000 K.**

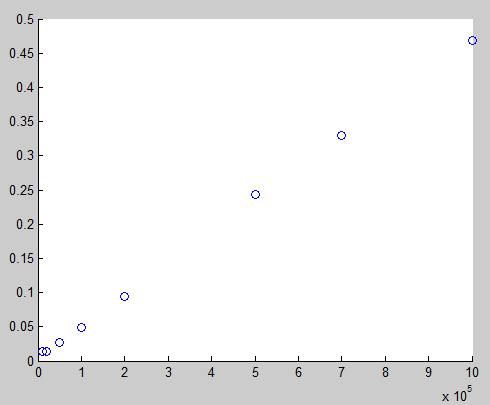


So a general pattern will be

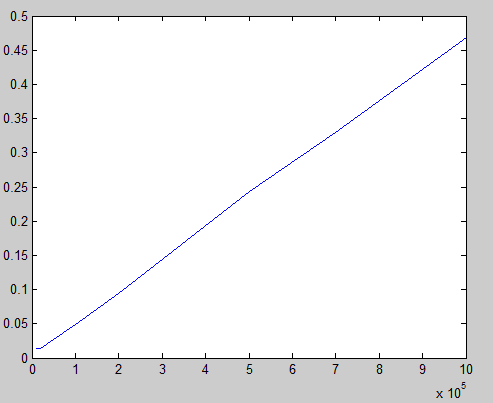


2 NODE MPI CLUSTER PERFORMANCE

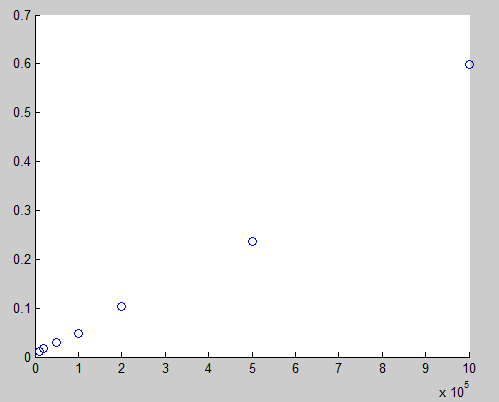
2. **For 3 Node cluster**



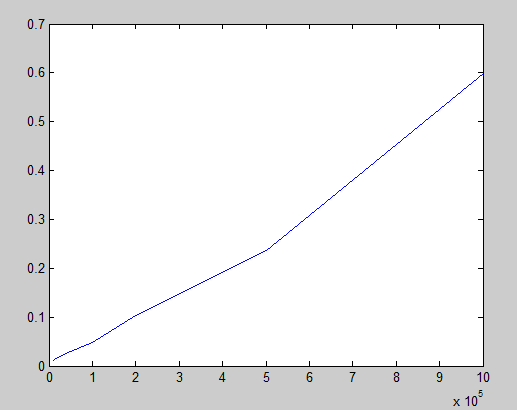
**3 NODE CLUSTER PERFORMANCE**



**3 NODE CLUSTER GENERAL PERFORMANCE**

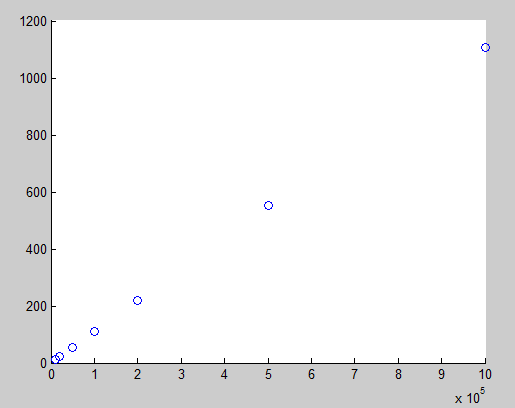


**4 NODE CLUSTER PERFORMANCES**

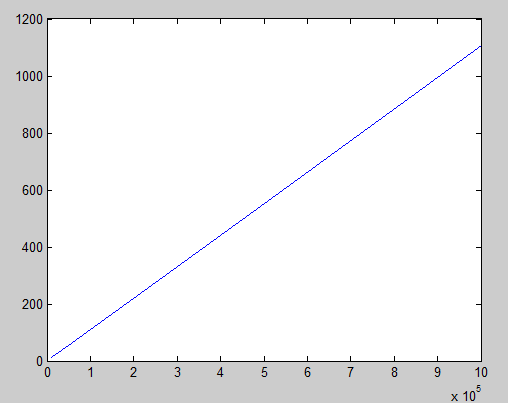


**4 NODE CLUSTER GENERAL PERFORAMNCE**

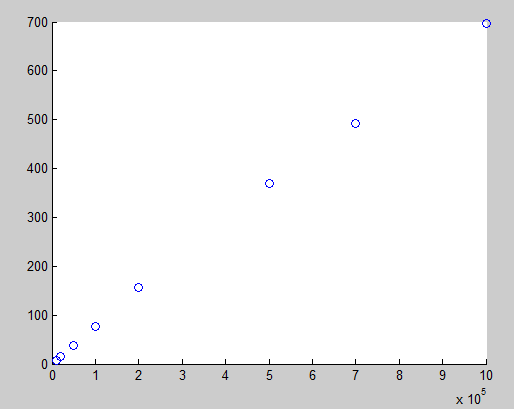
**2. JOIN QUERY PERFORMANCE CURVES**



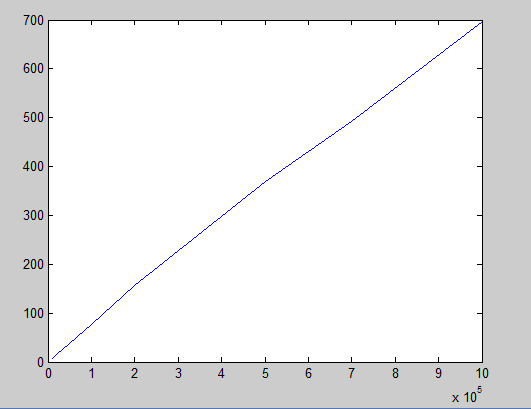
**2 NODE PERFORMANCE**



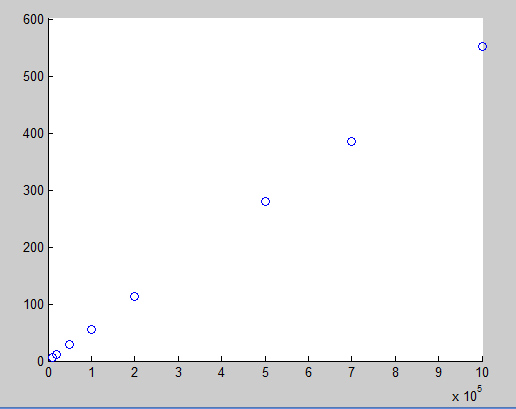
**2 NODE GENERAL PERFORMANCE**



**3 NODE PERFORMANCE**

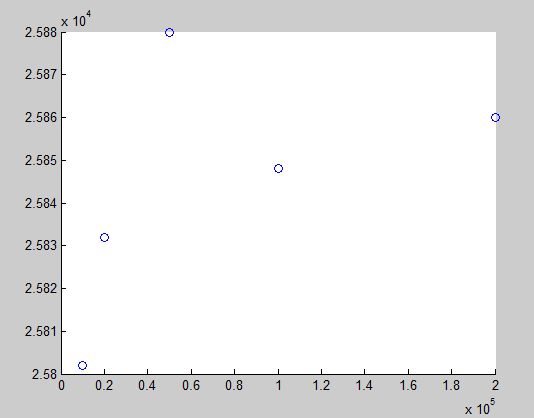


**3 NODE GENERAL PERFORMANCE**

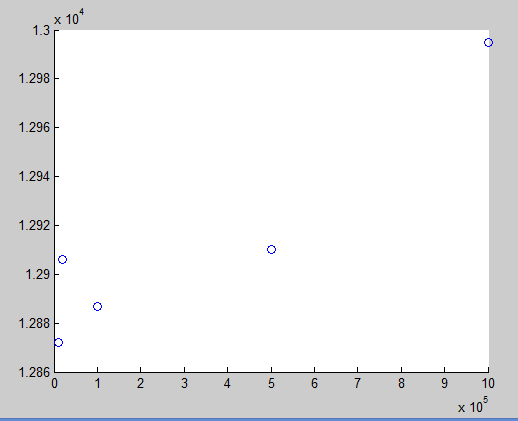


**4 NODE PERFORMANCE**

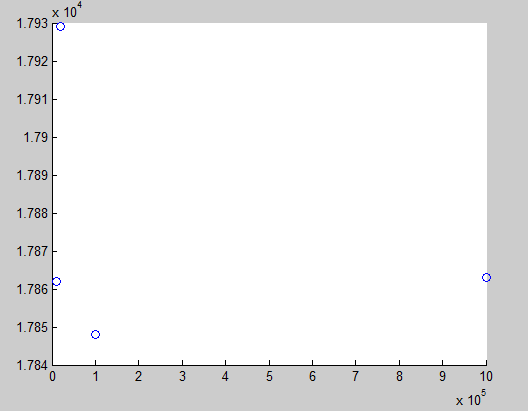
2.**FOR HADOOP:**



**8 NODE HADOOP CLUSTER**



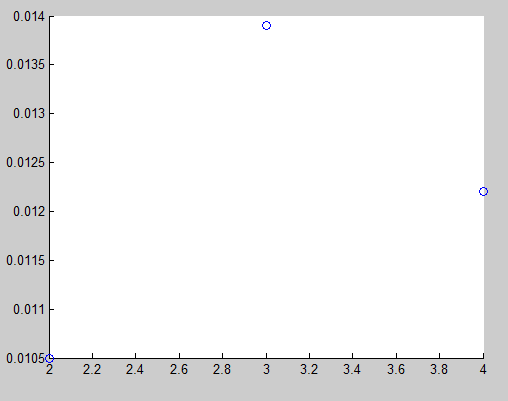
**3 NODE HADOOP CLUSTER PERFORMANCE**



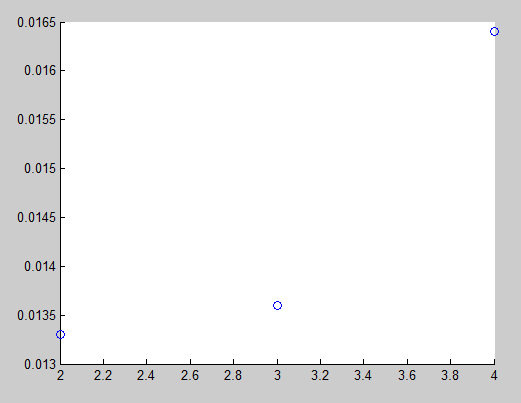
**2 NODE HADOOP CLUSTER PERFORMANCE**

**Performance measured by varying number of node**

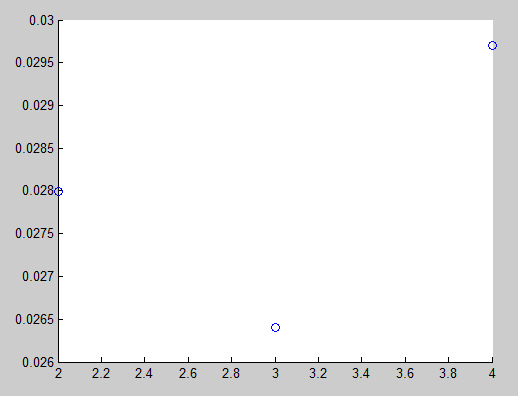
Number of nodes are 2,3 and 4



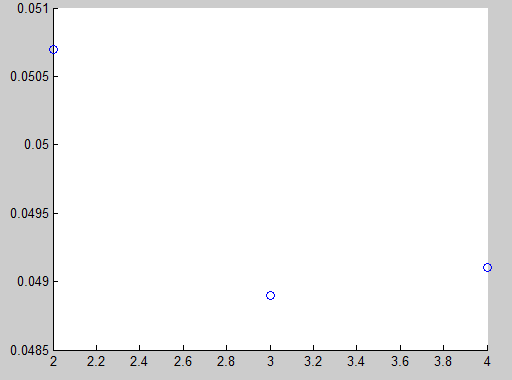
**FILE SIZE 10K**



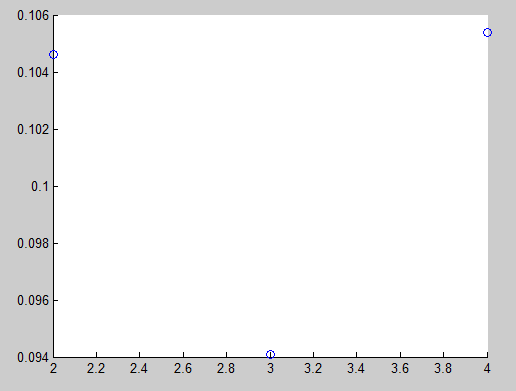
**File size 20K**



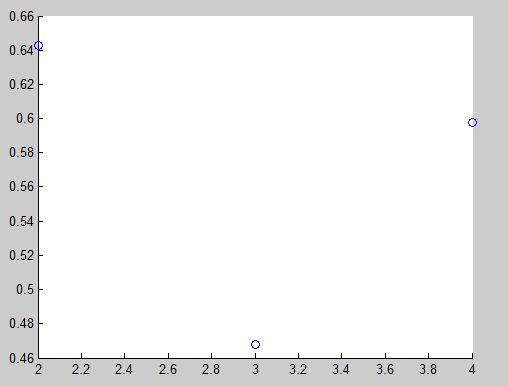
**File size 50k**



**File size 100K**



**File size 200k**



**File size 1000K**