

**Part 2:****Table 1: N = 100,000**

R (# of ranks)	Estimated result	Time Taken
4		
8		
16		
32		

**Table 2: R = 32**

N	Estimated result	Time Taken
100		
1000		
10,000		
100,000		

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**Part 3:****Table 1: N = 100,000**

R (# of ranks)	Estimated result	Time Taken
4		
8		
16		
32		

**Table 2: R = 32**

N	Estimated result	Time Taken
100		
1000		
10,000		
100,000		