**Short Project 10 - HybridRMQ**

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**Instructions:**

Run the following commands:

javac HybridRMQ.java

java HybridRMQ

In the argument, give the name of the test file.

**Report**

1. For the array size of 128M

**Range: 17293315 - 12247441**

Preprocessing time: Time: 1743 msec.

Memory: 1068 MB / 1413 MB.

Minimum value: 4

Query Time: Time: 0 msec.

Memory: 1069 MB / 1413 MB.

1. Running for 256M size array

**Range: 193456577 140388400**

Preprocessing time: Time: 3400 msec.

Memory: 1990 MB / 2004 MB.

Minimum value: 6

Query Time: Time: 0 msec.

Memory: 1991 MB / 2004 MB.

1. Running for 512M size array

**Range : 86517615 - 88830808**

Preprocessing time: Time: 9688 msec.

Memory: 4572 MB / 6985 MB.

Minimum value : 8

Query Time: Time: 0 msec.

Memory: 4572 MB / 6985 MB

**Analysis**

The average of all the query time comes out to be 0 msec.

The query time for all the ranges is 0 msec.

Irrespective of the range, the query time is 0msec for any size of the array.