

HOMEWORK: HOMEWORK 6.4

You have a sharded system with three shards and have sharded the collections "grades" in the "test" database across those shards. The output of `sh.status()` when connected to mongos looks like this:

```

mongos> sh.status()
--- Sharding Status ---
  sharding version: { "_id" : 1, "version" : 3 }
  shards:
    { "_id" : "s0", "host" : "s0/localhost:37017,localhost:37018,localhost:37019" }
    { "_id" : "s1", "host" : "s1/localhost:47017,localhost:47018,localhost:47019" }
    { "_id" : "s2", "host" : "s2/localhost:57017,localhost:57018,localhost:57019" }
  databases:
    { "_id" : "admin", "partitioned" : false, "primary" : "config" }
    { "_id" : "test", "partitioned" : true, "primary" : "s0" }
      test.grades chunks:
                s1      4
                s0      4
                s2      4
                { "student_id" : { $minKey : 1 } } --> { "student_id" : 0 } on : s1 Timestamp(12000, 0)
                { "student_id" : 0 } --> { "student_id" : 2640 } on : s0 Timestamp(11000, 1)
                { "student_id" : 2640 } --> { "student_id" : 91918 } on : s1 Timestamp(10000, 1)
                { "student_id" : 91918 } --> { "student_id" : 176201 } on : s0 Timestamp(4000, 2)
                { "student_id" : 176201 } --> { "student_id" : 256639 } on : s2 Timestamp(12000, 1)
                { "student_id" : 256639 } --> { "student_id" : 344351 } on : s2 Timestamp(6000, 2)
                { "student_id" : 344351 } --> { "student_id" : 424983 } on : s0 Timestamp(7000, 2)
                { "student_id" : 424983 } --> { "student_id" : 509266 } on : s1 Timestamp(8000, 2)
                { "student_id" : 509266 } --> { "student_id" : 596849 } on : s1 Timestamp(9000, 2)
                { "student_id" : 596849 } --> { "student_id" : 772260 } on : s0 Timestamp(10000, 2)
                { "student_id" : 772260 } --> { "student_id" : 945802 } on : s2 Timestamp(11000, 2)
                { "student_id" : 945802 } --> { "student_id" : { $maxKey : 1 } } on : s2 Timestamp(11000, 3)

```

If you ran the query

```
use test  
db.grades.find({'student_id':530289})
```

Which shards would be involved in answering the query?



- ☐ s0,s1 and s2
- ☐ s0
- ☒ s1
- ☐ s2

SHOW ANSWER

Submission deadline has passed.

