

----- key_range batch_size record_cnt ms_per ms_tot
run 1 spawn_updates 10000000 1000000 10000000 30000000 4000 60000

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MyMacbookAir:cpp hkl120$ !  
./driver test/spawn1.jitd  
Now using policy: Cracker[ pushdown balance inline ]  
Start[test/scan_for_1_min.jitd]  
Start Updates [10000000--30000000] by 1000000; every 4000 ms for 60000ms  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 184868 scans over 2 s  
Rate: 92433.9 scans/sec  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 211214 scans over 2 s  
Rate: 105607 scans/sec  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 65373 scans over 2.00001 s  
Rate: 32686.3 scans/sec  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 143828 scans over 2 s  
Rate: 71913.9 scans/sec  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 21320 scans over 2.00001 s  
Rate: 10660 scans/sec  
gROOT [Cracker[ pushdown balance inline ]; 3000000 elements]  
  BTree[49971061]  
    BTree[33294016]  
      SortedArray[1000000 elements]  
      SortedArray[500109 elements]  
    BTree[83251350]  
      SortedArray[1000000 elements]  
      SortedArray[499891 elements]  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 116149 scans over 2 s  
Rate: 58074.4 scans/sec  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 12131 scans over 2.26614 s  
Rate: 5353.17 scans/sec  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 91576 scans over 2.26282 s  
Rate: 40469.8 scans/sec  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 6344 scans over 2 s  
Rate: 3172 scans/sec  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 55945 scans over 2.03509 s  
Rate: 27490.2 scans/sec  
gROOT [Cracker[ pushdown balance inline ]; 6000000 elements]  
  BTree[49971061]  
    Concat  
      BTree[24976755]  
        BTree[19980868]  
          SortedArray[1000000 elements]  
          SortedArray[250230 elements]  
        BTree[44994070]  
          SortedArray[1000000 elements]  
          SortedArray[248858 elements]  
        Array[500792 elements]  
      BTree[74922319]  
        BTree[69917787]  
          Concat  
            SortedArray[1000000 elements]  
            SortedArray[199265 elements]  
          Concat  
            SortedArray[250287 elements]  
            Array[50037 elements]  
        Concat  
          BTree[83251350]  
            SortedArray[417634 elements]  
            SortedArray[832991 elements]  
          Array[249906 elements]  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 18 scans over 2.04556 s  
Rate: 8.79954 scans/sec  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 46179 scans over 2.05924 s  
Rate: 22425.3 scans/sec  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 20 scans over 2.03293 s  
Rate: 9.83802 scans/sec  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 27763 scans over 2.12394 s  
Rate: 13071.4 scans/sec  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 24 scans over 2.02216 s  
Rate: 11.8685 scans/sec  
gROOT [Cracker[ pushdown balance inline ]; 8000000 elements]  
  BTree[49971061]  
    BTree[24976755]  
      BTree[12486703]  
        SortedArray[1000000 elements]  
        BTree[14278690]  
          SortedArray[142984 elements]  
        Concat  
          SortedArray[750750 elements]  
          SortedArray[106728 elements]  
      BTree[37456405]  
        SortedArray[1000000 elements]  
        BTree[39243297]  
          SortedArray[143286 elements]  
          SortedArray[857057 elements]  
    BTree[74922319]  
      BTree[62447586]  
        SortedArray[1000000 elements]  
        SortedArray[999153 elements]  
      BTree[83251350]  
        SortedArray[667173 elements]  
        BTree[97571816]  
          Concat  
            SortedArray[1000000 elements]  
            Array[142669 elements]  
            SortedArray[190200 elements]  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 18354 scans over 2.03325 s  
Rate: 9026.93 scans/sec  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 22 scans over 2.10209 s  
Rate: 10.4658 scans/sec  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 15524 scans over 2.0553 s
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Rate: 7553.16 scans/sec
Scanning for 2000 s in [0,100000000] -> 1000 keys/read
Random Scan: 21 scans over 2.04734 s
Rate: 10.2572 scans/sec
Scanning for 2000 s in [0,100000000] -> 1000 keys/read
Random Scan: 4846 scans over 2.13656 s
Rate: 2268.13 scans/sec
gROOT [[Cracker[ pushdown balance inline ]; 11000000 elements]
  BTree[49971061]
    BTree[24976755]
      BTree[12486703]
        Concat
          BTree[9986945]
            SortedArray[1000000 elements]
            SortedArray[250358 elements]
          Array[124366 elements]
        BTree[14278690]
          Concat
            SortedArray[179282 elements]
            SortedArray[17711 elements]
          Concat
            BTree[24275382]
              SortedArray[1000000 elements]
              SortedArray[70653 elements]
            Array[106837 elements]
      BTree[37456405]
        BTree[34973947]
          BTree[34067388]
            SortedArray[1000000 elements]
            SortedArray[100061 elements]
          Concat
            SortedArray[250174 elements]
            Array[25109 elements]
        BTree[39243297]
          Concat
            SortedArray[179071 elements]
            Array[17927 elements]
          BTree[49244137]
            Concat
              SortedArray[1000000 elements]
              SortedArray[100123 elements]
            Concat
              SortedArray[72169 elements]
              Array[7368 elements]
      BTree[74922319]
        BTree[62447586]
          BTree[59953537]
            Concat
              SortedArray[1000000 elements]
              SortedArray[100435 elements]
            Concat
              SortedArray[250177 elements]
              Array[24901 elements]
          Concat
            BTree[72432508]
              SortedArray[1000000 elements]
              SortedArray[249215 elements]
            Array[124854 elements]
        BTree[83251350]
          Concat
            SortedArray[833065 elements]
            Array[83328 elements]
        BTree[93240455]
          Concat
            SortedArray[1000000 elements]
            Array[100427 elements]
          Concat
            SortedArray[665836 elements]
            SortedArray[66553 elements]
      Scanning for 2000 s in [0,100000000] -> 1000 keys/read
      Random Scan: 23 scans over 2.06624 s
      Rate: 11.1314 scans/sec
      Scanning for 2000 s in [0,100000000] -> 1000 keys/read
      Random Scan: 28 scans over 2.19615 s
      Rate: 12.7496 scans/sec
      Scanning for 2000 s in [0,100000000] -> 1000 keys/read
      Random Scan: 24 scans over 2.16051 s
      Rate: 11.1085 scans/sec
      Scanning for 2000 s in [0,100000000] -> 1000 keys/read
      Random Scan: 27 scans over 2.045 s
      Rate: 13.2029 scans/sec
      Scanning for 2000 s in [0,100000000] -> 1000 keys/read
      Random Scan: 18 scans over 2.07417 s
      Rate: 8.67817 scans/sec
      gROOT [[Cracker[ pushdown balance inline ]; 13000000 elements]
        BTree[49971061]
          BTree[24976755]
            BTree[12486703]
              BTree[7689912]
                SortedArray[1000000 elements]
                SortedArray[624515 elements]
              BTree[14278690]
                Concat
                  Concat
                    SortedArray[196993 elements]
                    Array[18051 elements]
                  Array[18137 elements]
                BTree[22605027]
                  Concat
                    SortedArray[1000000 elements]
                    SortedArray[83410 elements]
                  Concat
                    BTree[23360599]
                      SortedArray[90911 elements]
                    Concat
                      BTree[24275382]
                        SortedArray[100048 elements]
                      Concat
                        SortedArray[70653 elements]
                        Array[6789 elements]
                      Array[16029 elements]
                    Array[23849 elements]
          BTree[37456405]
            BTree[32671383]
              SortedArray[1000000 elements]
              SortedArray[624505 elements]

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BTree[47576581]
BTree[39243297]
Concat
Concat
SortedArray[196998 elements]
SortedArray[17999 elements]
Array[17795 elements]
BTree[46934187]
SortedArray[1000000 elements]
SortedArray[83550 elements]
SortedArray[311280 elements]
BTree[74922319]
BTree[62447586]
BTree[58284096]
BTree[57646445]
SortedArray[1000000 elements]
SortedArray[83367 elements]
Concat
SortedArray[500903 elements]
SortedArray[41827 elements]
BTree[70126119]
SortedArray[1000000 elements]
BTree[70766767]
SortedArray[83400 elements]
Concat
SortedArray[498690 elements]
Array[41814 elements]
BTree[83251350]
BTree[82609136]
SortedArray[1000000 elements]
SortedArray[83302 elements]
BTree[92328028]
BTree[91572835]
BTree[90936409]
SortedArray[1000000 elements]
SortedArray[83006 elements]
Concat
SortedArray[90307 elements]
Array[7698 elements]
Concat
SortedArray[908436 elements]
SortedArray[75738 elements]
Scanning for 2000 s in [0,100000000) -> 1000 keys/read
Random Scan: 24 scans over 2.2834 s
Rate: 10.5107 scans/sec
Scanning for 2000 s in [0,100000000) -> 1000 keys/read
Random Scan: 18 scans over 2.19206 s
Rate: 8.21147 scans/sec
Scanning for 2000 s in [0,100000000) -> 1000 keys/read
Random Scan: 11 scans over 2.09993 s
Rate: 5.23826 scans/sec
Scanning for 2000 s in [0,100000000) -> 1000 keys/read
Random Scan: 22 scans over 2.2521 s
Rate: 9.76864 scans/sec
Scanning for 2000 s in [0,100000000) -> 1000 keys/read
Random Scan: 12 scans over 2.06174 s
Rate: 5.82032 scans/sec
gROOT [Cracker[ pushdown balance inline ]; 14000000 elements]
BTree[49971061]
BTree[24976755]
BTree[12486703]
BTree[7689912]
BTree[7688693]
Concat
SortedArray[1000000 elements]
SortedArray[76796 elements]
Concat
SortedArray[187 elements]
Array[16 elements]
Concat
Concat
SortedArray[576706 elements]
SortedArray[47991 elements]
Array[47989 elements]
BTree[22605027]
BTree[14278690]
Concat
Concat
Delete
Concat
SortedArray[215044 elements]
SortedArray[18137 elements]
SortedArray[17741 elements]
SortedArray[17826 elements]
Array[17945 elements]
BTree[21961794]
BTree[21416390]
SortedArray[1000000 elements]
SortedArray[76369 elements]
Concat
SortedArray[83487 elements]
SortedArray[6497 elements]
Concat
Concat
SortedArray[284392 elements]
SortedArray[23995 elements]
SortedArray[23671 elements]
Concat
BTree[37456405]
BTree[32671383]
SortedArray[999488 elements]
Concat
SortedArray[576250 elements]
SortedArray[48008 elements]
BTree[47576581]
BTree[39243297]
Concat
Delete
Concat
Concat
SortedArray[196998 elements]
SortedArray[17999 elements]
Array[17795 elements]
Array[17869 elements]
Array[18036 elements]
BTree[46934187]

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Concat
  SortedArray[923808 elements]
  SortedArray[77094 elements]
Concat
  Delete
    SortedArray[83550 elements]
    SortedArray[6453 elements]
    Array[6442 elements]
Concat
  Delete
    SortedArray[311280 elements]
    SortedArray[23863 elements]
    Array[23767 elements]
  Array[250408 elements]
BTree[74922319]
BTree[62447586]
  BTree[57646445]
    Concat
      SortedArray[999918 elements]
      SortedArray[77163 elements]
      SortedArray[673924 elements]
    BTree[70126119]
      BTree[69572573]
        SortedArray[1000000 elements]
        SortedArray[76728 elements]
      Concat
        Concat
          SortedArray[576197 elements]
          SortedArray[48240 elements]
          SortedArray[48098 elements]
        BTree[83251350]
          Concat
            Concat
              SortedArray[999672 elements]
              SortedArray[82870 elements]
            Array[83534 elements]
          BTree[92328028]
            BTree[90935937]
              Concat
                SortedArray[1000000 elements]
                SortedArray[76901 elements]
              Concat
                SortedArray[181191 elements]
                Array[13849 elements]
            Concat
              SortedArray[984047 elements]
              Array[75623 elements]
Time[test/scan_for_1_min.jitd]: 62 s
Start[test/scan_for_1_min.jitd]
Scanning for 2000 s in [0,100000000) -> 1000 keys/read
End Updates
Random Scan: 26 scans over 2.13747 s
Rate: 12.1639 scans/sec
Scanning for 2000 s in [0,100000000) -> 1000 keys/read
Random Scan: 16 scans over 2.07241 s
Rate: 7.72046 scans/sec
Scanning for 2000 s in [0,100000000) -> 1000 keys/read
Random Scan: 17591 scans over 2.00012 s
Rate: 8794.98 scans/sec
Scanning for 2000 s in [0,100000000) -> 1000 keys/read
Random Scan: 27664 scans over 2.00003 s
Rate: 13831.8 scans/sec
Scanning for 2000 s in [0,100000000) -> 1000 keys/read
Random Scan: 27193 scans over 2.00002 s
Rate: 13596.4 scans/sec
gROOT [Cracker[ pushdown balance inline ]; 14000000 elements]
  BTree[49971061]
    BTree[24976755]
      BTree[12486703]
        BTree[7139970]
          SortedArray[1000000 elements]
          SortedArray[749685 elements]
        BTree[22605027]
          BTree[14278690]
            SortedArray[251211 elements]
            BTree[21416390]
              SortedArray[1000000 elements]
              SortedArray[166353 elements]
              SortedArray[332058 elements]
          BTree[37456405]
            BTree[32121272]
              SortedArray[1000000 elements]
              SortedArray[748720 elements]
            BTree[47576581]
              BTree[39243297]
                SortedArray[251057 elements]
                BTree[46378495]
                  SortedArray[1000000 elements]
                  SortedArray[167662 elements]
                  SortedArray[335299 elements]
            BTree[74922319]
              BTree[62447586]
                BTree[57099872]
                  SortedArray[1000000 elements]
                  SortedArray[751005 elements]
                BTree[69572573]
                  SortedArray[1000000 elements]
                  SortedArray[749263 elements]
              BTree[83251350]
                BTree[82064235]
                  SortedArray[1000000 elements]
                  SortedArray[166076 elements]
                BTree[92328028]
                  BTree[90383984]
                    SortedArray[1000000 elements]
                    SortedArray[271941 elements]
                  BTree[99564567]
                    SortedArray[1000000 elements]
                    SortedArray[59670 elements]
              Scanning for 2000 s in [0,100000000) -> 1000 keys/read
              Random Scan: 27511 scans over 2.00005 s
              Rate: 13755.2 scans/sec
              Scanning for 2000 s in [0,100000000) -> 1000 keys/read
              Random Scan: 28185 scans over 2.00001 s
              Rate: 14092.4 scans/sec
              Scanning for 2000 s in [0,100000000) -> 1000 keys/read

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Random Scan: 28120 scans over 2 s
Rate: 14060 scans/sec
Scanning for 2000 s in [0,100000000) -> 1000 keys/read
Random Scan: 27758 scans over 2.00002 s
Rate: 13878.9 scans/sec
Scanning for 2000 s in [0,100000000) -> 1000 keys/read
Random Scan: 27157 scans over 2.00003 s
Rate: 13578.3 scans/sec
gROOT [[Cracker[ pushdown balance inline ]; 14000000 elements]
  BTree[49971061]
    BTree[24976755]
      BTree[12486703]
        BTree[7139970]
          SortedArray[1000000 elements]
          SortedArray[749685 elements]
        BTree[22605027]
          BTree[14278690]
            SortedArray[251211 elements]
            BTree[21416390]
              SortedArray[1000000 elements]
              SortedArray[166353 elements]
            SortedArray[332058 elements]
          BTree[37456405]
            BTree[32121272]
              SortedArray[1000000 elements]
              SortedArray[748720 elements]
            BTree[47576581]
              BTree[39243297]
                SortedArray[251057 elements]
                BTree[46378495]
                  SortedArray[1000000 elements]
                  SortedArray[167662 elements]
                SortedArray[335299 elements]
              BTree[74922319]
                BTree[62447586]
                  BTree[57099872]
                    SortedArray[1000000 elements]
                    SortedArray[751005 elements]
                  BTree[69572573]
                    SortedArray[1000000 elements]
                    SortedArray[749263 elements]
                BTree[83251350]
                  BTree[82064235]
                    SortedArray[1000000 elements]
                    SortedArray[166076 elements]
                  BTree[92328028]
                    BTree[90383984]
                      SortedArray[1000000 elements]
                      SortedArray[271941 elements]
                    BTree[99564567]
                      SortedArray[1000000 elements]
                      SortedArray[59670 elements]
                Scanning for 2000 s in [0,100000000) -> 1000 keys/read
                Random Scan: 27957 scans over 2.00003 s
                Rate: 13978.3 scans/sec
                Scanning for 2000 s in [0,100000000) -> 1000 keys/read
                Random Scan: 28024 scans over 2.00004 s
                Rate: 14011.7 scans/sec
                Scanning for 2000 s in [0,100000000) -> 1000 keys/read
                Random Scan: 27372 scans over 2.00006 s
                Rate: 13685.6 scans/sec
                Scanning for 2000 s in [0,100000000) -> 1000 keys/read
                Random Scan: 27113 scans over 2.00001 s
                Rate: 13556.4 scans/sec
                Scanning for 2000 s in [0,100000000) -> 1000 keys/read
                Random Scan: 27276 scans over 2.00001 s
                Rate: 13638 scans/sec
                gROOT [[Cracker[ pushdown balance inline ]; 14000000 elements]
                  BTree[49971061]
                    BTree[24976755]
                      BTree[12486703]
                        BTree[7139970]
                          SortedArray[1000000 elements]
                          SortedArray[749685 elements]
                        BTree[22605027]
                          BTree[14278690]
                            SortedArray[251211 elements]
                            BTree[21416390]
                              SortedArray[1000000 elements]
                              SortedArray[166353 elements]
                            SortedArray[332058 elements]
                          BTree[37456405]
                            BTree[32121272]
                              SortedArray[1000000 elements]
                              SortedArray[748720 elements]
                            BTree[47576581]
                              BTree[39243297]
                                SortedArray[251057 elements]
                                BTree[46378495]
                                  SortedArray[1000000 elements]
                                  SortedArray[167662 elements]
                                SortedArray[335299 elements]
                              BTree[74922319]
                                BTree[62447586]
                                  BTree[57099872]
                                    SortedArray[1000000 elements]
                                    SortedArray[751005 elements]
                                  BTree[69572573]
                                    SortedArray[1000000 elements]
                                    SortedArray[749263 elements]
                                BTree[83251350]
                                  BTree[82064235]
                                    SortedArray[1000000 elements]
                                    SortedArray[166076 elements]
                                  BTree[92328028]
                                    BTree[90383984]
                                      SortedArray[1000000 elements]
                                      SortedArray[271941 elements]
                                    BTree[99564567]
                                      SortedArray[1000000 elements]
                                      SortedArray[59670 elements]
                                Scanning for 2000 s in [0,100000000) -> 1000 keys/read
                                Random Scan: 28481 scans over 2.00002 s
                                Rate: 14240.4 scans/sec
                                Scanning for 2000 s in [0,100000000) -> 1000 keys/read
                                Random Scan: 27980 scans over 2.00003 s
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Rate: 13989.8 scans/sec  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 27297 scans over 2 s  
Rate: 13648.5 scans/sec  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 27580 scans over 2.00001 s  
Rate: 13790 scans/sec  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 27056 scans over 2.00007 s  
Rate: 13527.5 scans/sec  
gROOT [Cracker] pushdown balance inline ; 1400000 elements]  
BTree[49971061]  
    BTree[24976755]  
        BTree[12486703]  
            BTree[7139970]  
                SortedArray[1000000 elements]  
                SortedArray[749685 elements]  
            BTree[22605027]  
                BTree[14278690]  
                    SortedArray[251211 elements]  
                    BTree[21416390]  
                        SortedArray[1000000 elements]  
                        SortedArray[166353 elements]  
                    SortedArray[332058 elements]  
                BTree[37456405]  
                    BTree[32121272]  
                        SortedArray[1000000 elements]  
                        SortedArray[748720 elements]  
                    BTree[47576581]  
                        BTree[39243297]  
                            SortedArray[251057 elements]  
                            BTree[46378495]  
                                SortedArray[1000000 elements]  
                                SortedArray[167662 elements]  
                            SortedArray[335299 elements]  
                    BTree[74922319]  
                        BTree[62447586]  
                            BTree[57099872]  
                                SortedArray[1000000 elements]  
                                SortedArray[751005 elements]  
                            BTree[69572573]  
                                SortedArray[1000000 elements]  
                                SortedArray[749263 elements]  
                        BTree[83251350]  
                            BTree[82064235]  
                                SortedArray[1000000 elements]  
                                SortedArray[166076 elements]  
                            BTree[92328028]  
                                BTree[90383984]  
                                    SortedArray[1000000 elements]  
                                    SortedArray[271941 elements]  
                                BTree[99564567]  
                                    SortedArray[1000000 elements]  
                                    SortedArray[59670 elements]  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 27173 scans over 2.00001 s  
Rate: 13586.4 scans/sec  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 27328 scans over 2.00001 s  
Rate: 13663.9 scans/sec  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 27871 scans over 2.00005 s  
Rate: 13935.1 scans/sec  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 28093 scans over 2.00007 s  
Rate: 14046 scans/sec  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 27641 scans over 2.00001 s  
Rate: 13820.4 scans/sec  
gROOT [Cracker] pushdown balance inline ; 1400000 elements]  
BTree[49971061]  
    BTree[24976755]  
        BTree[12486703]  
            BTree[7139970]  
                SortedArray[1000000 elements]  
                SortedArray[749685 elements]  
            BTree[22605027]  
                BTree[14278690]  
                    SortedArray[251211 elements]  
                    BTree[21416390]  
                        SortedArray[1000000 elements]  
                        SortedArray[166353 elements]  
                    SortedArray[332058 elements]  
                BTree[37456405]  
                    BTree[32121272]  
                        SortedArray[1000000 elements]  
                        SortedArray[748720 elements]  
                    BTree[47576581]  
                        BTree[39243297]  
                            SortedArray[251057 elements]  
                            BTree[46378495]  
                                SortedArray[1000000 elements]  
                                SortedArray[167662 elements]  
                            SortedArray[335299 elements]  
                    BTree[74922319]  
                        BTree[62447586]  
                            BTree[57099872]  
                                SortedArray[1000000 elements]  
                                SortedArray[751005 elements]  
                            BTree[69572573]  
                                SortedArray[1000000 elements]  
                                SortedArray[749263 elements]  
                        BTree[83251350]  
                            BTree[82064235]  
                                SortedArray[1000000 elements]  
                                SortedArray[166076 elements]  
                            BTree[92328028]  
                                BTree[90383984]  
                                    SortedArray[1000000 elements]  
                                    SortedArray[271941 elements]  
                                BTree[99564567]  
                                    SortedArray[1000000 elements]  
                                    SortedArray[59670 elements]  
Scanning for 2000 s in [0,100000000) -> 1000 keys/read  
Random Scan: 28174 scans over 2.00007 s  
Rate: 14086.5 scans/sec
```

```
Scanning for 2000 s in [0,100000000) -> 1000 keys/read
Random Scan: 27664 scans over 2.00005 s
Rate: 13831.6 scans/sec
Scanning for 2000 s in [0,100000000) -> 1000 keys/read
Random Scan: 27418 scans over 2.00002 s
Rate: 13708.9 scans/sec
Scanning for 2000 s in [0,100000000) -> 1000 keys/read
Random Scan: 28220 scans over 2.00006 s
Rate: 14109.6 scans/sec
Scanning for 2000 s in [0,100000000) -> 1000 keys/read
Random Scan: 24970 scans over 2.00003 s
Rate: 12484.8 scans/sec
gROOT [Cracker[ pushdown balance inline ]; 1400000 elements]
  BTree[49971061]
    BTree[24976755]
      BTree[12486703]
        BTree[7139970]
          SortedArray[1000000 elements]
          SortedArray[749685 elements]
        BTree[22605027]
          BTree[14278690]
            SortedArray[251211 elements]
            BTree[21416390]
              SortedArray[1000000 elements]
              SortedArray[166353 elements]
            SortedArray[332058 elements]
          BTree[37456405]
            BTree[32121272]
              SortedArray[1000000 elements]
              SortedArray[748720 elements]
            BTree[47576581]
              BTree[39243297]
                SortedArray[251057 elements]
                BTree[46378495]
                  SortedArray[1000000 elements]
                  SortedArray[167662 elements]
                SortedArray[335299 elements]
              BTree[74922319]
                BTree[62447586]
                  BTree[57099872]
                    SortedArray[1000000 elements]
                    SortedArray[751005 elements]
                  BTree[69572573]
                    SortedArray[1000000 elements]
                    SortedArray[749263 elements]
                BTree[83251350]
                  BTree[82064235]
                    SortedArray[1000000 elements]
                    SortedArray[166076 elements]
                  BTree[92328028]
                    BTree[90383984]
                      SortedArray[1000000 elements]
                      SortedArray[271941 elements]
                    BTree[99564567]
                      SortedArray[1000000 elements]
                      SortedArray[59670 elements]
                Time[test/scan_for_1_min.jitd]: 60 s
                Time[test/spawn1.jitd]: 122 s
                MyMacbookAir:cpp hkl120$
```