Outputs:

Test case 1

```
End of records!Records: 146340
         added 390 recs..so far 146340
End of records!Records: 147045
         added 705 recs..so far 147045
End of records!Records: 147430
         added 385 recs..so far 147430
End of records!Records: 148053
         added 623 recs..so far 148053
End of records!Records: 148115
         added 62 recs..so far 148115
End of records!Records: 148298
         added 183 recs..so far 148298
End of records!Records: 148654
         added 356 recs..so far 148654
End of records!Records: 149431
         added 777 recs..so far 149431
End of records!Records: 149699
         added 268 recs..so far 149699
End of records!Records: 149965
         added 266 recs..so far 149965
End of records!Records: 150000
         added 35 recs..so far 150000
 create finished.. 150000 recs inserted
Calling cleanup!
r[naman⊕0xb1ad3]-(~/git/database-from-scratch/src/submit)-[git://mile2 🗡]-
[0] 0:vim- 1:zsh*
```

Test case 2

```
acctbal: [4923.4], c mktsegment: [MACHINERY], c comment: [ silent requests haggle carefully regular, regular packages. enticing, even deposits wake
slyly among the]
.c custkey: [12022], c name: [Customer#000012022], c address: [PwVDMfqZtKWOo], c nationkey: [24], c phone: [34-998-408-4382], c acctbal: [2877.36],
c mktsegment: [HOUSEHOLD], c comment: [layers. regular pinto beans about the quickly regular ideas cajole blithely]
.c custkey: [125210], c name: [Customer#000125210], c address: [BJiJAg79TvSTdxgPeb63sUqKaOVv], c nationkey: [24], c phone: [34-998-711-2597], c acc
tbal: [6678.32], c mktsegment: [FURNITURE], c comment: [ly ironic, ironic accounts. theodolites among the slyly even patterns nag slyly fluffi]
.c custkey: [50667], c name: [Customer#000050667], c address: [9aGxwCYLcG6y2eA], c nationkey: [24], c phone: [34-999-115-2195], c acctbal: [8764.52
], c mktsegment: [FURNITURE], c comment: [mptotes around the slyly bold instructions boost furi]
.c custkey: [7288], c name: [Customer#000007288], c address: [,dZCqJe94SqXQjxAd7WxRMYyFVKGd4pFIrAshk], c nationkey: [24], c phone: [34-999-121-7718
], c acctbal: [82.07], c mktsegment: [HOUSEHOLD], c comment: [ns sublate furiously. carefully ironic platelets grow furiously. ironic, bold theodol
ites hang above thl
.c custkey: [84642], c name: [Customer#000084642], c address: [MJerprOnUYRK], c nationkey: [24], c phone: [34-999-195-7029], c acctbal: [6912.63],
c mktsegment: [BUILDING], c comment: [totes above the pending, regular hockey players sleep blithely after the blithely even deposits. carefully re
c custkey: [148611], c name: [Customer#000148611], c address: [HoNNKAELd2vMNyGWpw3ZZgSNaDs7f0dNIH64], c nationkey: [24], c phone: [34-999-283-6448
], c acctbal: [24.12], c mktsegment: [HOUSEHOLD], c comment: [requests above the blithely pending asymptotes sleep carefully about the slyly even e
xcu]
.c custkey: [102689], c name: [Customer#000102689], c address: [uPFxngvSOaDQIL], c nationkey: [24], c phone: [34-999-363-7145], c acctbal: [6256.97
], c mktsegment: [AUTOMOBILE], c comment: [ly regular asymptotes haggle fluffily according to the furiously bold courts. daring ]
.c custkey: [35478], c name: [Customer#000035478], c address: [0t5zcyiiLhzXXivX4Y2FeToQIh,iovs6zyA], c nationkey: [24], c phone: [34-999-379-6016],
c acctbal: [6097.18], c mktsegment: [MACHINERY], c comment: [ithout the fluffily ironic packages, daring, even de]
.c custkey: [103505], c name: [Customer#000103505], c address: [XPNXpdCD7HRqcV8ABpjF3ixDc9A6X ZB2 ], c nationkey: [24], c phone: [34-999-404-9770],
c acctbal: [582.88], c mktsegment: [FURNITURE], c comment: [fully even deposits boost. quickly ironic requests could have to are according to the
final accounts. final]
.c custkey: [62707], c name: [Customer#000062707], c address: [bRbtSTIXhh], c nationkey: [24], c phone: [34-999-473-9448], c acctbal: [7429.32], c
mktsegment: [FURNITURE], c comment: [zzle slyly after the slyly ironic pinto beans. bold, fina]
.c custkey: [41774], c name: [Customer#000041774], c address: [DpHfJFKVkr4LQeif9t5SSKzDUa4G3asKeya5M7dz], c nationkey: [24], c phone: [34-999-535-1
203], c acctbal: [7118.29], c mktsegment: [FURNITURE], c comment: [c requests sleep. quickly silent requests wake fluffily. furiously close package
s nag furiously across the carefl
.c custkey: [94308], c name: [Customer#000094308], c address: [5aE9PLelngeVg8v6KCg0yR,NhDT5uC4], c nationkey: [24], c phone: [34-999-618-6653], c a
cctbal: [8636.13], c mktsegment: [FURNITURE], c comment: [g, even deposits. carefully unus]
.c custkey: [102414], c name: [Customer#000102414], c address: [Xzg9eiWbsxiQW,LUCyUAcPo0ENdLUQt], c nationkey: [24], c phone: [34-999-618-6881], c
acctbal: [9614.62], c mktsegment: [MACHINERY], c comment: [usly final packages. carefully even packages by the permanently special gifts ne]
scanned 150000 recs
Calling cleanup!
 ·[naman@0xblad3]-(~/git/database-from-scratch/src/submit)-[git://mile2 ×]-
                                                                                                                                           CPU:8.7
[0] 0:zsh- 1:zsh*
```

Test case 3

```
> ./test.out < tmp/test3.txt</pre>
** IMPORTANT: MAKE SURE THE INFORMATION BELOW IS CORRECT **
 catalog location:
                        catalog
 tpch files dir:
                        tpch-dbgen/
 heap files dir:
                        bin/
 select test option:
        1. create sorted dbfile
        scan a dbfile
        run some query
 select table:
        1. nation
         2. region
         3. customer
         4. part
         partsupp
         6. supplier
        7. orders
        8. lineitem
         Enter CNF predicate (when done press ctrl-D):
                c custkey: [103505], c name: [Customer#000103505], c address: [XPNXpdCD7HRqcV8ABpjF3ixDc9A6X ZB2 ], c nationkey: [24], c phone: [34
-999-404-9770], c acctbal: [582.88], c mktsegment: [FURNITURE], c comment: [fully even deposits boost. quickly ironic requests could have to are ac
cording to the final accounts. final]
c custkey: [62707], c name: [Customer#000062707], c address: [bRbtSTIXhh], c nationkey: [24], c phone: [34-999-473-9448], c acctbal: [7429.32], c m
ktsegment: [FURNITURE], c comment: [zzle slyly after the slyly ironic pinto beans. bold, fina]
c custkey: [41774], c name: [Customer#000041774], c address: [DpHfJFKVkr4LQeif9t5SSKzDUa4G3asKeya5M7dz], c nationkey: [24], c phone: [34-999-535-12
03], c acctbal: [7118.29], c mktsegment: [FURNITURE], c comment: [c requests sleep. quickly silent requests wake fluffily. furiously close packages
nag furiously across the caref]
c custkey: [94308], c name: [Customer#000094308], c address: [5aE9PLelngeVg8v6KCgOyR,NhDT5uC4], c nationkey: [24], c phone: [34-999-618-6653], c ac
ctbal: [8636.13], c mktsegment: [FURNITURE], c comment: [q, even deposits. carefully unus]
 query over bin/customer.bin returned 4 recs
Calling cleanup!
 [naman@0xb1ad3]-(~/git/database-from-scratch/src/submit)-[git://mile2 x]-
[0] 0:./test.out- 1:zsh*
                                                                                                                                          CPU:19.3
```

GTest

```
[naman@0xb1ad3]-(~/git/database-from-scratch/src/submit)-[git://mile2 💉]-
  ./gtest.out
  IMPORTANT: MAKE SURE THE INFORMATION BELOW IS CORRECT **
 catalog location:
                       catalog
 tpch files dir:
                       tpch-dbgen/
heap files dir:
                       bin/
 ======== Running 8 tests from 4 test cases.
   ------ Global test environment set-up.
        ---] 3 tests from DBFILETEST
           DBFILETEST.DBCreate
 tpch file will be loaded from tpch-dbgen/customer.tbl
EOF!
       OK ] DBFILETEST.DBCreate (327 ms)
            DBFILETEST.DB0pen
       OK ] DBFILETEST.DBOpen (0 ms)
            DBFILETEST.DBClose
       OK ] DBFILETEST.DBClose (0 ms)
  -----] 3 tests from DBFILETEST (327 ms total)
  -----] 1 test from RUNGEN DBSETUPTEST
            RUNGEN DBSETUPTEST.DBSetup
       OK ] RUNGEN_DBSETUPTEST.DBSetup (0 ms)
  -----] 1 test from RUNGEN DBSETUPTEST (0 ms total)
            3 tests from TOURNAMENTTEST
 RUN
            TOURNAMENTTEST.Playnum
            TOURNAMENTTEST.Playnum (0 ms)
TOURNAMENTTEST.Promote
            TOURNAMENTTEST.Promote (0 ms)
TOURNAMENTTEST.InvalidNumberOfPlayer
            TOURNAMENTTEST.InvalidNumberOfPlayer (1 ms)
    -----] 3 tests from TOURNAMENTTEST (1 ms total)
  -----] 1 test from SORTEDFILETEST
            SORTEDFILETEST.GetNext
            SORTEDFILETEST.GetNext (0 ms)
  -----] 1 test from SORTEDFILETEST (1 ms total)
 Global test environment tear-down
 ========] 8 tests from 4 test cases ran. (329 ms total)
  PASSED ] 8 tests.
Calling cleanup!
 ·[naman@0xblad3]-(~/git/database-from-scratch/src/submit)-[git://mile2 x]-
  [0] 0:zsh- 1:zsh*
                                                                                                                                                                       CPU:0.0
```