Outputs:

Output1.txt

```
n_nationkey: [11], n_name: [IRAQ], n_regionkey: [4], n comment: [nic deposits boost atop the quickly final requests? quickly regula]
  n nationkey: [10], n name: [IRAN], n regionkey: [4], n comment: [efully alongside of the slyly final dependencies. ]
  n nationkey: [9], n name: [INDONESIA], n regionkey: [2], n comment: [ slyly express asymptotes. regular deposits haggle slyly. carefully ironic hockey players sleep blith
  ely. carefull]
  n nationkey: [8], n name: [INDIA], n regionkey: [2], n comment: [ss excuses cajole slyly across the packages. deposits print aroun]
  n nationkey: [7], n name: [GERMANY], n regionkey: [3], n comment: [l platelets. regular accounts x-ray: unusual, regular acco]
  consumer: removed 25 recs from the pipe
   consumer: 25 recs out of 25 recs in sorted order
  Calling cleanup!
  ********
   consumer: removed 150000 recs from the pipe
   consumer: 150000 recs out of 150000 recs in sorted order
  Calling cleanup!
  o orderkey: [524451], o custkey: [51430], o orderstatus: [0], o totalprice: [420623], o orderdate: [1997-09-22], o orderpriority: [1-URGENT], o clerk: [Clerk#000000755].
  o shippriority: [0], o comment: [inal pinto beans pr]
  o orderkey: [524450], o custkey: [21094], o orderstatus: [0], o totalprice: [187237], o orderdate: [1996-02-28], o orderpriority: [3-MEDIUM], o clerk: [Clerk#000000087],
  o shippriority: [0], o comment: [carefully silent sheave]
  o orderkey: [524449], o custkey: [68072], o orderstatus: [0], o totalprice: [73680.1], o orderdate: [1995-08-06], o orderpriority: [4-NOT SPECIFIED], o clerk: [Clerk#0000
  00407], o shippriority: [0], o comment: [lithely against the regular deposits. blithely special ideas across]
  o orderkey: [524448], o custkey: [98731], o orderstatus: [0], o totalprice: [83530.3], o orderdate: [1998-01-15], o orderpriority: [5-LOW], o clerk: [Clerk#000000015], o
  shippriority: [0], o comment: [instructions boost fluffily according to the never ironic ideas. ironic id]
  o orderkey: [524423], o custkey: [72682], o orderstatus: [0], o totalprice: [132826], o orderdate: [1995-07-29], o orderpriority: [2-HIGH], o clerk: [Clerk#000000344], o
  shippriority: [0], o comment: [ress requests sleep slyly pending accounts. fin]
  o orderkey: [524422], o custkey: [98321], o orderstatus: [0], o totalprice: [119840], o orderdate: [1997-10-17], o orderpriority: [4-NOT SPECIFIED], o clerk: [Clerk#00000
  0043], o shippriority: [0], o comment: [und the furiously bold instructions. multipliers aff]
  o orderkey: [524421], o custkey: [15161], o orderstatus: [0], o totalprice: [213110], o orderdate: [1997-07-08], o orderpriority: [1-URGENT], o clerk: [Clerk#000000204],
  o shippriority: [0], o comment: [eep carefully. slyly bold asymptotes sleep across the final pinto ]
   consumer: removed 1500000 recs from the pipe
   consumer: 1500000 recs out of 1500000 recs in sorted order
  Calling cleanup!
  n nationkey: [13], n name: [JORDAN], n regionkey: [4], n comment: [ic deposits are blithely about the carefully regular pa]
  n nationkey: [12], n name: [JAPAN], n regionkey: [2], n comment: [ously. final, express gifts cajole a]
  n nationkey: [11], n name: [IRAQ], n regionkey: [4], n comment: [nic deposits boost atop the quickly final requests? quickly regula]
  n nationkey: [10], n name: [IRAN], n regionkey: [4], n comment: [efully alongside of the slyly final dependencies.]
  n nationkey: [9], n name: [INDONESIA], n regionkey: [2], n comment: [ slyly express asymptotes. regular deposits haggle slyly. carefully ironic hockey players sleep blith
  ely. carefull]
  n nationkey: [8], n name: [INDIA], n regionkey: [2], n comment: [ss excuses cajole slyly across the packages. deposits print aroun]
  n nationkey: [7], n name: [GERMANY], n regionkey: [3], n comment: [l platelets. regular accounts x-ray: unusual, regular acco]
  consumer: removed 25 recs from the pipe
   consumer: 25 recs out of 25 recs in sorted order
  <u>Calling</u> cleanup!
NORMAL tmp/output1.txt
                                                                                                              text utf-8[unix] 482 words 100\% \equiv 36/36 \, \square : 16
```

[tmp] 0:sub* 1:zsh- CPU:0.8%

GTests

Screenshot 1

> ./gtest.out ** IMPORTANT: MAKE SURE THE INFORMATION BELOW IS CORRECT ** catalog location: db/catalog tpch files dir: tpch-dbgen/ heap files dir: bin/ =======] Running 7 tests from 3 test cases. Global test environment set-up. 3 tests from DBFILETEST DBFILETEST.DBCreate tpch file will be loaded from tpch-dbgen/supplier.tbl EOF! DBFILETEST.DBCreate (47 ms) RUN DBFILETEST.DBOpen DBFILETEST.DBOpen (0 ms) RUN DBFILETEST.DBClose DBFILETEST.DBClose (0 ms) ----] 3 tests from DBFILETEST (47 ms total) 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) RUN TOURNAMENTTEST. Promote TOURNAMENTTEST.Promote (0 ms) RUN TOURNAMENTTEST.InvalidNumberOfPlayer TOURNAMENTTEST.InvalidNumberOfPlayer (1 ms) 3 tests from TOURNAMENTTEST (1 ms total) -----] Global test environment tear-down ========= 7 tests from 3 test cases ran. (48 ms total) 7 tests. =======] Running 7 tests from 3 test cases. -----] Global test environment set-up. ----] 3 tests from DBFILETEST] DBFILETEST.DBCreate tpch file will be loaded from tpch-dbgen/partsupp.tbl [src] 0:test 1:Makefile* 2:tpch- 3:git 4:trv

Screenshot 2

```
tpch file will be loaded from tpch-dbgen/partsupp.tbl
EOF!
            DBFILETEST.DBCreate (4469 ms)
 RUN
            DBFILETEST.DB0pen
            DBFILETEST.DBOpen (1 ms)
 RUN
            DBFILETEST.DBClose
            DBFILETEST.DBClose (0 ms)
            3 tests from DBFILETEST (4470 ms total)
            1 test from RUNGEN DBSETUPTEST
            RUNGEN DBSETUPTEST.DBSetup
            RUNGEN DBSETUPTEST.DBSetup (0 ms)
           1 test from RUNGEN DBSETUPTEST (0 ms total)
            3 tests from TOURNAMENTTEST
            TOURNAMENTTEST.Playnum
 RUN
            TOURNAMENTTEST.Playnum (0 ms)
 RUN
            TOURNAMENTTEST. Promote
            TOURNAMENTTEST.Promote (0 ms)
 RUN
            TOURNAMENTTEST.InvalidNumberOfPlayer
           TOURNAMENTTEST.InvalidNumberOfPlayer (2 ms)
            3 tests from TOURNAMENTTEST (2 ms total)
            Global test environment tear-down
 =======] 7 tests from 3 test cases ran. (4472 ms total)
          1 7 tests.
 =======] Running 7 tests from 3 test cases.
     ----] Global test environment set-up.
 ----- 3 tests from DBFILETEST
           DBFILETEST.DBCreate
tpch file will be loaded from tpch-dbgen/part.tbl
E0F!
           DBFILETEST.DBCreate (1090 ms)
 RUN
            DBFILETEST.DB0pen
           DBFILETEST.DBOpen (0 ms)
 RUN
            DBFILETEST.DBClose
       OK ] DBFILETEST.DBClose (0 ms)
      ----] 3 tests from DBFILETEST (1090 ms total)
           1 test from RUNGEN DBSETUPTEST
 RUN
            RUNGEN DBSETUPTEST.DBSetup
       OK ] RUNGEN DBSETUPTEST.DBSetup (0 ms)
  -----] 1 test from RUNGEN DBSETUPTEST (0 ms total)
[src] 0:test 1:Makefile* 2:tpch- 3:git 4:try
```

GTests (Contd.)

```
3 tests from TOURNAMENTTEST
 RUN
            TOURNAMENTTEST.Playnum
            TOURNAMENTTEST.Playnum (0 ms)
 RUN
            TOURNAMENTTEST. Promote
            TOURNAMENTTEST. Promote (0 ms)
 RUN
            TOURNAMENTTEST.InvalidNumberOfPlayer
            TOURNAMENTTEST.InvalidNumberOfPlayer (1 ms)
            3 tests from TOURNAMENTTEST (1 ms total)
            Global test environment tear-down
            7 tests from 3 test cases ran. (1091 ms total)
            7 tests.
            Running 7 tests from 3 test cases.
            Global test environment set-up.
            3 tests from DBFILETEST
            DBFILETEST.DBCreate
tpch file will be loaded from tpch-dbgen/nation.tbl
EOF!
       OK ] DBFILETEST.DBCreate (1 ms)
 RUN
            DBFILETEST.DB0pen
            DBFILETEST.DBOpen (0 ms)
            DBFILETEST.DBClose
            DBFILETEST.DBClose (0 ms)
            3 tests from DBFILETEST (1 ms total)
            1 test from RUNGEN DBSETUPTEST
            RUNGEN DBSETUPTEST.DBSetup
            RUNGEN DBSETUPTEST.DBSetup (0 ms)
            1 test from RUNGEN DBSETUPTEST (0 ms total)
            3 tests from TOURNAMENTTEST
            TOURNAMENTTEST.Playnum
 RUN
            TOURNAMENTTEST.Playnum (0 ms)
 RUN
            TOURNAMENTTEST.Promote
            TOURNAMENTTEST.Promote (0 ms)
            TOURNAMENTTEST.InvalidNumberOfPlayer
            TOURNAMENTTEST.InvalidNumberOfPlayer (1 ms)
            3 tests from TOURNAMENTTEST (1 ms total)
      ----] Global test environment tear-down
            7 tests from 3 test cases ran. (2 ms total)
  PASSED
            7 tests.
       ====] Running 7 tests from 3 test cases.
 -----] Global test environment set-up.
[src] 0:test 1:Makefile* 2:tpch- 3:git 4:try
```

Screenshot 3