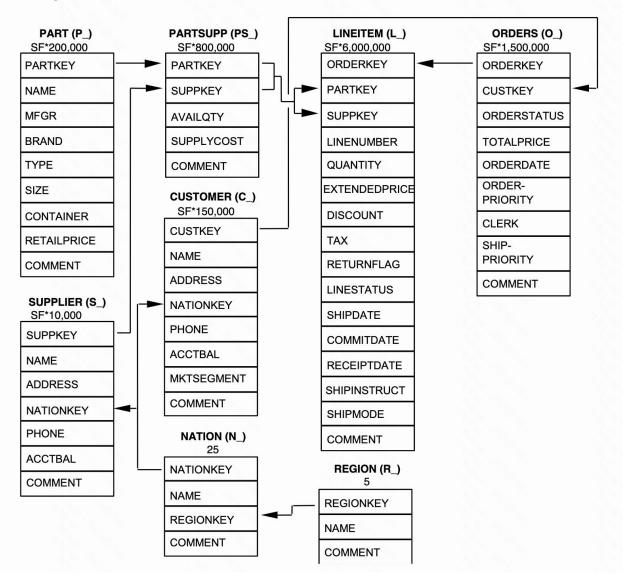
Figure 2: The TPC-H Schema



PART Table Layout

Column Name Datatype Requirements Comment

P_PARTKEY identifier SF*200,000 are populated

P_NAME variable text, size 55

P_MFGR fixed text, size 25

P_BRAND fixed text, size 10

P_TYPE variable text, size 25

P SIZE integer

P_CONTAINER fixed text, size 10

P_RETAILPRICE decimal

P_COMMENT variable text, size 23

Primary Key: P_PARTKEY

SUPPLIER Table Layout

<u>Column Name</u> <u>Datatype Requirements</u> <u>Comment</u>

S_SUPPKEY identifier SF*10,000 are populated

S_NAME fixed text, size 25

S ADDRESS variable text, size 40

S_NATIONKEY Identifier Foreign Key to N_NATIONKEY

S_PHONE fixed text, size 15

S_ACCTBAL decimal

S_COMMENT variable text, size 101

Primary Key: S_SUPPKEY

PARTSUPP Table Layout

Column Name Datatype Requirements Comment

PS_PARTKEY Identifier Foreign Key to P_PARTKEY
PS_SUPPKEY Identifier Foreign Key to S_SUPPKEY

PS_AVAILQTY integer
PS_SUPPLYCOST Decimal

PS_COMMENT variable text, size 199

Primary Key: PS_PARTKEY, PS_SUPPKEY

CUSTOMER Table Layout

<u>Column Name</u> <u>Datatype Requirements</u> <u>Comment</u>

C_CUSTKEY Identifier SF*150,000 are populated

C_NAME variable text, size 25

C_ADDRESS variable text, size 40

C NATIONKEY Identifier Foreign Key to N NATIONKEY

C_PHONE fixed text, size 15

C_ACCTBAL Decimal

C_MKTSEGMENT fixed text, size 10

C COMMENT variable text, size 117

Primary Key: C_CUSTKEY

ORDERS Table Layout

<u>Column Name</u> <u>Datatype Requirements</u> <u>Comment</u>

O_ORDERKEY Identifier SF*1,500,000 are sparsely populated

O_CUSTKEY Identifier Foreign Key to C_CUSTKEY

O_ORDERSTATUS fixed text, size 1

O_TOTALPRICE Decimal

O_ORDERDATE Date

O_ORDERPRIORITY fixed text, size 15

O_CLERK fixed text, size 15

O_SHIPPRIORITY Integer

O_COMMENT variable text, size 79

Primary Key: O_ORDERKEY

Comment: Orders are not present for all customers. In fact, one-third of the customers do not have any order in the database. The orders are assigned at random to two-thirds of the customers (see Clause 4:). The purpose of this is to exercise the capabilities of the DBMS to handle "dead data" when joining two or more tables.

LINEITEM Table Layout

Column Name Datatype Requirements Comment

L_ORDERKEY identifier Foreign Key to O_ORDERKEY

L_PARTKEY identifier Foreign key to P_PARTKEY, first part of the

compound Foreign Key to (PS_PARTKEY,

PS_SUPPKEY) with L_SUPPKEY

 $L_SUPPKEY \qquad \qquad Identifier \qquad \qquad For eign \ key \ to \ S_SUPPKEY, \ second \ part \ of \ the$

compound Foreign Key to (PS_PARTKEY,

PS_SUPPKEY) with L_PARTKEY

L_LINENUMBER i

integer

 $L_QUANTITY$

decimal

L_EXTENDEDPRICE

decimal

L_DISCOUNT

decimal

 L_TAX

decimal

 $L_RETURNFLAG$

fixed text, size 1

 $L_LINESTATUS$

fixed text, size 1

L_SHIPDATE

date

 $L_{COMMITDATE}$

date

 $L_RECEIPTDATE$

date

L_SHIPINSTRUCT

fixed text, size 25

 $L_SHIPMODE$

fixed text, size 10

L_COMMENT

variable text size 44

Primary Key: L_ORDERKEY, L_LINENUMBER

NATION Table Layout

Column Name

Datatype Requirements

Comment

N_NATIONKEY

identifier

25 nations are populated

N_NAME

fixed text, size 25

N_REGIONKEY

identifier

Foreign Key to R_REGIONKEY

N_COMMENT

variable text, size 152

Primary Key: N_NATIONKEY

REGION Table Layout

Column Name

Datatype Requirements

Comment

R_REGIONKEY

identifier

5 regions are populated

R_NAME

fixed text, size 25

R_COMMENT

variable text, size 152

Primary Key: R_REGIONKEY