

Query Exercise: A drastically simplified database:

Supplier(SNum, SName, SCity, Status)

Part(PNum, PName, Color, Weight)

Supply(SNum, PNum, Quantity)

An example of relation instance:

Supplier:

SNum	SName	SCity	Status
S1	ABC	Dallas	10
S2	DEF	Houston	20
S3	Go go	Houston	12
S4	P&G	Dallas	2
S5	Yap	Phoenix	5
S6	Yue	Dallas	1

Part:

PNum	PName	Color	Weight
P1	Drum	Green	10
P2	Hammer	Green	20
P3	Minipod	Red	4
P4	Micropod	Red	4
P5	Blue Spur	Blue	3
P6	Musical Box	Blue	13
P7	Bear	Blue	9
P8	Panda	White	10

Supply:

SNum	PNum	Quantity
S1	P1	10
S1	P2	3
S2	P1	11
S2	P2	1
S2	P4	6
S3	P4	1
S3	P5	2
S3	P6	12
S3	P7	5
S4	P2	1
S4	P5	10
S4	P7	4
S4	P8	10
S5	P1	11
S5	P3	5
S5	P4	10
S5	P5	14

Some query questions:

Supplier(SNum, SName, SCity, Status)

Part(PNum, PName, Color, Weight)

Supply(SNum, PNum, Quantity)

1. Show all information of suppliers in the city Houston.
2. Show all information of parts with the color Red.
3. Show all information of suppliers with a status greater than 5.
4. Show all information of parts with a color of Red and weight more than 5 lbs.
5. Show all information of parts with a color of Red or Blue.
6. List all supplier names.
7. List all part numbers.
8. List all part colors.
9. Show all supplier names in the city Houston.
10. Show all supplier numbers that represent suppliers supplying part P2.
11. Show all supplier numbers that represent suppliers supplying more than 20 of part P2.
12. Show the part numbers and weights of all parts with color Red.
13. Show the part numbers and weights of all parts with weights more than 5 lbs.
14. Show all supplier status of all suppliers in Houston.
15. Show all information of suppliers that supplies part P1.
16. Show all information of parts supplied by supplier S1.
17. Show all information of parts supplied by supplier S1 or S2.
18. Show all supplier names of suppliers supplying part P1.
19. Show all information of parts supplied by supplier S1 and S2.
20. Show all part numbers representing parts supplied by supplier S3 or S4.
21. Show all cities with suppliers supplying part P3.
22. Show all status with active suppliers (a supplier is active if it supplies at least one part).
23. Show all information of parts that are supplied by a supplier in the city Houston.
24. Show all information of suppliers supplying a red part.
25. Show all information of suppliers with a status of greater than five and supplies a part of weight greater than five.
26. Show all cities that contain inactive suppliers.
27. Show the supplier numbers of all suppliers that supply part P1 but not part P2.
28. Show the supplier numbers of all suppliers that supply red parts but not green parts.
29. Show all information of parts that are supplied by at least one supplier in Houston.
30. Show the supplier numbers of all suppliers that supplies all parts supplied by supplier S1.
31. Show the part names of all parts that are supplied by at least one supplier in Houston with a status of 5 or above.
32. Show the part names of all parts that are supplied by every supplier in Houston with a status of 5 or above.