

## SQL Practice Questions

Few SQL practice questions are given below. Create the required tables, and populate the given data into those. You can verify the results of your SQL queries against the expected results in each question.

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### Schema

SUPPLIER {SNO, SNAME, STATUS, CITY}  
PART {PNO, PNAME, COLOR, WEIGHT, CITY}  
SUPP\_PART {SNO, PNO, QTY}

### Data

- The "SUPPLIER" Table

SNO	SNAME	STATUS	CITY
s1	Smith	20	London
s2	Jones	10	Paris
s3	Blakes	30	Paris
s4	Clark	20	London
s5	Adams	30	Athens
s6	Oh		Seattle
s7	Fidel		Seattle
s8	Carlyle		Seattle

- The "PART" table

PNO	PNAME	COLOR	WEIGHT	CITY
p1	Nut	Red	12	London
p2	Bolt	Green	17	Paris
p3	Screw	Blue	17	Rome
p4	Screw	Red	14	London
p5	Cam	Blue	12	Paris
p6	Cog	Red	19	London

- The "SUPP\_PART" Table

SNO	PNO	QTY
s1	p1	300
s1	p2	200
s1	p3	400
s1	p4	200
s1	p5	100
s1	p6	100
s2	p1	300
s2	p2	400
s3	p2	200
s4	p2	200
s4	p4	300
s4	p5	400

## Simple Queries

- Q1: Get supplier numbers and status for suppliers in Paris.

SNO	STATUS
s2	10
s3	30

- Q2: Get part numbers for all parts supplied.

PNO
p1
p2
p3
p4
p5
p6
p1
p2
p2
p2
p4
p5

- Q3: Get distinct part numbers for all parts supplied.

PNO
p1
p2
p3
p4
p5
p6

- Q4: Get full details of all suppliers.

SNO	SNAME	STATUS	CITY
s1	Smith	20	London
s2	Jones	10	Paris
s3	Blakes	30	Paris
s4	Clark	20	London
s5	Adams	30	Athens
s6	Oh		Seattle
s7	Fidel		Seattle
s8	Carlyle		Seattle

- Q5: For all parts, get the part number and the weight of that part in grams (part weights are given in pounds in the table P). 1 pound is 454 grams.

PNO	WEIGHT	Weight-in-Grams
p1	12	5448
p2	17	7718
p3	17	7718
p4	14	6356
p5	12	5448
p6	19	8626

- Q6: Get supplier numbers for suppliers in Paris with status > 20.

SNO
s3

- Q7: Get supplier numbers and status for suppliers in Paris in descending order status.

SNO	STATUS
s3	30
s2	10

- Q8: Get supplier numbers for suppliers with no status.

SNO
s6
s7
s8

### Queries Requiring Table Joins

- Q9: Get all combinations of supplier information and part information where the supplier and part concerned are co-located in the same city.

SNO	SNAME	S.CITY	STATUS	PNO	PNAME	COLOR	WEIGHT	P.CITY
s1	Smith	London	20	p6	Cog	Red	19	London
s1	Smith	London	20	p4	Screw	Red	14	London
s1	Smith	London	20	p1	Nut	Red	12	London
s2	Jones	Paris	10	p5	Cam	Blue	12	Paris
s2	Jones	Paris	10	p2	Bolt	Green	17	Paris
s3	Blakes	Paris	30	p5	Cam	Blue	12	Paris
s3	Blakes	Paris	30	p2	Bolt	Green	17	Paris
s4	Clark	London	20	p6	Cog	Red	19	London
s4	Clark	London	20	p4	Screw	Red	14	London
s4	Clark	London	20	p1	Nut	Red	12	London

- Q10: Get all combinations of supplier information and part information where the supplier and part concerned are co-located, but omitting suppliers with status 20.

SNO	SNAME	S.CITY	STATUS	PNO	PNAME	COLOR	WEIGHT	P.CITY
s2	Jones	Paris	10	p5	Cam	Blue	12	Paris
s2	Jones	Paris	10	p2	Bolt	Green	17	Paris

### Queries Requiring Aggregate Functions

- Q13: Get the total number of suppliers.

CountOfSNO
8

- Q14: Get the number of shipments for part p2.

CountOfPNO
4

- Q15: Get the total quantity of part p2 supplied.

SumOfQTY
1000

- Q16: For each part supplied, get the part number and the total shipment quantity for that part.

PNO	SumOfQTY
p1	600
p2	1000
p3	400
p4	500
p5	500
p6	100

- Q17: Get part numbers for all parts supplied by more than one supplier.

PNO
p1
p2
p4
p5

### Truncated Searching

- Q18: Get all parts whose names begin with the letter C.

PNAME
Cam
Cog