

COMP 3005
Assignment #2
Due: October 4

Instruction

1. This is an individual assignment. Copying is not allowed.
2. Submit your assignment as a single word/PDF document on [culearn](#).

Queries (20 marks)

Use Relational Algebra (ALG) to express the following queries based on the following suppliers-and-parts databases. Submit your algebra expressions for these queries as well as the query results.

Suppliers

<u>S#</u>	<u>SNAME</u>	<u>STATUS</u>	<u>CITY</u>
S1	Smith	20	London
S2	Jones	30	Paris
S3	Blake	30	Paris
S4	Clark	20	London
S5	Adams	30	Athens

Parts

<u>P#</u>	<u>PNAME</u>	<u>COLOR</u>	<u>WEIGHT</u>	<u>CITY</u>
P1	Nut	Red	12.0	London
P2	Bolt	Green	17.0	Paris
P3	Screw	Blue	17.0	Oslo
P4	Screw	Red	14.0	London
P5	Cam	Blue	12.0	Paris
P6	Cog	Red	19.0	London

SP

<u>S#</u>	<u>P#</u>	<u>QTY</u>
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	P3	300
S4	P4	400
S4	P5	500
S4	P6	600

1. Get the part names that Adams provides.
2. Get supplier names for suppliers who supply part P2.
3. Get supplier names and the total quantity of parts supplied.
4. Get supplier names for suppliers who supply parts with quantity less than 300
5. Get supplier names for suppliers who supply either blue or green parts.
6. Get supplier name/part name pairs such that the indicated supplier does not supply the indicated part.
7. Get supplier names for suppliers who does not supply any parts.
8. Get supplier names for suppliers who supply all parts.
9. Get supplier names for suppliers who supply all parts except P1.
10. Get supplier names and the number of parts and total quantity supplied.