A.2 select sname, city from supplier

+-------+--------+

| sname | city |

+-------+--------+

| Smith | London |

| Jones | Paris |

| Blake | Paris |

| Clark | London |

| Adams | Athens |

+-------+--------+

A.3 select \* from shipment where qty>=500;

+------+------+------+------+---------------------+

| snum | pnum | jnum | qty | ship\_ts |

+------+------+------+------+---------------------+

| S1 | P1 | J4 | 700 | 2020-02-24 13:30:00 |

| S2 | P3 | J4 | 500 | 2020-02-25 15:00:00 |

| S2 | P3 | J5 | 600 | 2020-02-25 15:20:00 |

| S2 | P3 | J7 | 800 | 2020-02-26 16:45:00 |

| S3 | P4 | J2 | 500 | 2020-02-24 14:15:00 |

| S5 | P4 | J4 | 800 | 2020-02-26 11:55:00 |

| S5 | P5 | J5 | 500 | 2020-02-24 16:50:00 |

| S5 | P6 | J4 | 500 | 2020-02-26 15:25:00 |

+------+------+------+------+---------------------+

A.4 select \* from project where City="London";

+------+-------+--------+

| jnum | jname | city |

+------+-------+--------+

| J5 | RAID | London |

| J7 | Tape | London |

+------+-------+--------+

A.5 select \* from shipment where jnum="j7" and qty>=200;

+------+------+------+------+---------------------+

| snum | pnum | jnum | qty | ship\_ts |

+------+------+------+------+---------------------+

| S2 | P3 | J7 | 800 | 2020-02-26 16:45:00 |

| S4 | P6 | J7 | 300 | 2020-02-25 12:55:00 |

+------+------+------+------+---------------------+

A.6 select \* from part where pname regexp "^C.\*" and city!="Paris" and weight>=15;

+------+-------+-------+--------+--------+

| pnum | pname | color | weight | city |

+------+-------+-------+--------+--------+

| P6 | Cog | Red | 19.0 | London |

+------+-------+-------+--------+--------+

A.7 select city, sum(weight) from part group by city;

+--------+-------------+

| city | sum(weight) |

+--------+-------------+

| London | 45.0 |

| Paris | 29.0 |

| Rome | 17.0 |

+--------+-------------+

A.8 select \* from supplier where city="London" order by status;

Question should be about Paris as the two statuses for London are the same

In that case the solution is: select \* from supplier where city="Paris" order by status;

A.9 select snum, sum(qty) as total\_qty from shipment where pnum!="P1" group by snum having total\_qty>1000;

Question should be: give per supplier the total shipment quantity for shipments that don't include part P1 and which have a total quantity larger than 1000

+------+-----------+

| snum | total\_qty |

+------+-----------+

| S2 | 3200 |

| S5 | 3000 |

+------+-----------+

A.10 select pnum, sum(qty) from shipment group by pnum;

+------+----------+

| pnum | sum(qty) |

+------+----------+

| P1 | 1000 |

| P2 | 300 |

| P3 | 3500 |

| P4 | 1300 |

| P5 | 1100 |

| P6 | 1300 |

+------+----------+

A.11 select sh.\* from shipment as sh join project as pr on sh.jnum=pr.jnum where pr.jname="Tape" and sh.qty>=200;

+------+------+------+------+---------------------+------+-------+--------+

| snum | pnum | jnum | qty | ship\_ts | jnum | jname | city |

+------+------+------+------+---------------------+------+-------+--------+

| S2 | P3 | J7 | 800 | 2020-02-26 16:45:00 | J7 | Tape | London |

| S4 | P6 | J7 | 300 | 2020-02-25 12:55:00 | J7 | Tape | London |

+------+------+------+------+---------------------+------+-------+--------+

A.12 select distinct(pname) from shipment sh join part pa on pa.pnum=sh.pnum join supplier su on su.snum=sh.snum where su.city="London";

Question should be clearer: give all part names shipped from a supplier in London

+-------+

| pname |

+-------+

| Nut |

| Cog |

+-------+

A.13 select sh.snum, sh.pnum, sh.jnum, sh.qty\*pa.weight from shipment sh join part pa on pa.pnum=sh.pnum;

The answer does not need group by (even if this is insinuated by the question by using the word total). This is because each shipment in the table is unique.

+------+------+------+------------------+

| snum | pnum | jnum | sh.qty\*pa.weight |

+------+------+------+------------------+

| S1 | P1 | J1 | 2400.0 |

| S1 | P1 | J4 | 8400.0 |

| S5 | P1 | J4 | 1200.0 |

| S5 | P2 | J2 | 3400.0 |

| S5 | P2 | J4 | 1700.0 |

| S2 | P3 | J1 | 6800.0 |

| S2 | P3 | J2 | 3400.0 |

| S2 | P3 | J3 | 3400.0 |

| S2 | P3 | J4 | 8500.0 |

| S2 | P3 | J5 | 10200.0 |

| S2 | P3 | J6 | 6800.0 |

| S2 | P3 | J7 | 13600.0 |

| S3 | P3 | J1 | 3400.0 |

| S5 | P3 | J4 | 3400.0 |

| S3 | P4 | J2 | 7000.0 |

| S5 | P4 | J4 | 11200.0 |

| S2 | P5 | J2 | 1200.0 |

| S5 | P5 | J4 | 4800.0 |

| S5 | P5 | J5 | 6000.0 |

| S5 | P5 | J7 | 1200.0 |

| S4 | P6 | J3 | 5700.0 |

| S4 | P6 | J7 | 5700.0 |

| S5 | P6 | J2 | 3800.0 |

| S5 | P6 | J4 | 9500.0 |

+------+------+------+------------------+

A.14 select pr.jnum, sum(sh.qty\*pa.weight) from shipment sh join project pr on pr.jnum=sh.jnum join part pa on pa.pnum=sh.pnum where pr.city="London" group by pr.jnum;

Question should be: give for all projects in London the total weight of shipments

If you take Paris there would be only one record.

A.15 select pr.jname, sum(sh.qty\*pa.weight) as total\_weight from shipment sh join part pa on pa.pnum=sh.pnum join project pr on pr.jnum=sh.jnum group by pr.jnum, pr.jname;

+---------+--------------+

| jname | total\_weight |

+---------+--------------+

| Sorter | 12600.0 |

| Display | 18800.0 |

| OCR | 9100.0 |

| Console | 48700.0 |

| RAID | 16200.0 |

| EDS | 6800.0 |

| Tape | 20500.0 |

+---------+--------------+

A.16 select pa1.City, pa1.pname, pa2.pname from part pa1 join part pa2 on pa1.city=pa2.city where pa1.pnum<pa2.pnum order by pa1.City;

+--------+-------+-------+

| City | pname | pname |

+--------+-------+-------+

| London | Nut | Screw |

| London | Nut | Cog |

| London | Screw | Cog |

| Paris | Bolt | Cam |

+--------+-------+-------+

B.1. select full\_names, physical\_address, gender from members;

+-------------------+------------------------+--------+

| full\_names | physical\_address | gender |

+-------------------+------------------------+--------+

| Janet Jones | First Street Plot No 4 | Female |

| Janet Smith Jones | Melrose 123 | Female |

| Robert Phil | 3rd Street 34 | Male |

| Gloria Williams | 2nd Street 23 | Female |

+-------------------+------------------------+--------+

B.2. select m.membership\_number, m.full\_names, year(m.date\_of\_birth) from members m;

+-------------------+-------------------+-----------------------+

| membership\_number | full\_names | year(m.date\_of\_birth) |

+-------------------+-------------------+-----------------------+

| 1 | Janet Jones | 1980 |

| 2 | Janet Smith Jones | 1980 |

| 3 | Robert Phil | 1989 |

| 4 | Gloria Williams | 1984 |

+-------------------+-------------------+-----------------------+

B.3. select concat(title, " (", year\_released, ")"), director from movies;

+-----------------------------------------+------------------+

| concat(title, " (", year\_released, ")") | director |

+-----------------------------------------+------------------+

| Pirates of the Caribean 4 (2011) | Rob Marshall |

| Forgetting Sarah Marshal (2008) | Nicholas Stoller |

| X-Men (2008) | NULL |

| Code Name Black (2010) | Edgar Jimz |

| Daddy's Little Girls (2007) | NULL |

| Angels and Demons (2007) | NULL |

| Davinci Code (2007) | NULL |

| Honey mooners (2005) | John Schultz |

| 67% Guilty (2012) | NULL |

+-----------------------------------------+------------------+

B.4. select m1.full\_names as member, m2.full\_names as reffered\_by from members m1 join members m2 on m2.membership\_number=m1.referred\_by;

+-----------------+-------------------+

| member | reffered\_by |

+-----------------+-------------------+

| Janet Jones | Janet Smith Jones |

| Robert Phil | Janet Smith Jones |

| Gloria Williams | Robert Phil |

+-----------------+-------------------+