

Part 1.

1.

T1.A	T1.Q	T1.R	T2.A	T2.B	T2.C
20	a	5	20	b	6
20	a	5	20	b	5

2.

T1.A	T1.Q	T1.R	T2.A	T2.B	T2.C
25	b	8	20	b	6
25	b	8	20	b	5

3.

T1.A	T1.Q	T1.R	T2.B	T2.C
20	a	5	b	6
20	a	5	b	5

4.

T1.A	T1.Q	T1.R	T2.A	T2.B	T2.C
20	a	5	20	b	5

Part 2.

1.

Π Name (σ Elo \geq 2850 (Players))

2.

Π Name (PLAYERS \bowtie Players.pID = Games.wpID GAMES)

3.

Π Name (σ Result = '1-0' (PLAYERS \bowtie Players.pID = Games.wpID GAMES))

4.

ρ YR (σ Year = 2018 (Events \bowtie Events.eID = Games.eID GAMES))

ρ WYR (YR \bowtie YR.wID = Players.pID Players)

ρ BYR (YR \bowtie YR.bID = Players.pID Players)

Π Name (WYR \cup BYR)

5.

ρ MC (σ pID = 1 (PLAYERS))

ρ MCW (σ Result = '0-1' (MC \bowtie MC.pID = Games.wpID GAMES))

ρ MCB (σ Result = '1-0' (MC \bowtie MC.pID = Games.bpID GAMES))

ρ MCWB (MCW \cup MCB)

ρ MCWBName/Name(MCWB)

Π Name, Year (MCWB \bowtie MCWB.eID = Events.eID EVENTS)

6.

ρ MC (σ pID = 1 (PLAYERS))

ρ MCW (MC \bowtie MC.pID = Games.wpID GAMES)

ρ MCBO (Π Name (MCW \bowtie MCW.bpID = Players.pID Players))

ρ MCB (MC \bowtie MC.pID = Games.bpID GAMES)

ρ MCWO (Π Name (MCB \bowtie MCB.wpID = Players.pID Players))

Π Name (MCWO \cup MCBO)

Part 3.

1.

a)

Students.Name
Hermione
Harry

b) Get the name of anyone who did not receive a C.

2.

a)

S2.Name
Hermione

b)

Get the name of anyone with the same date of birth as Ron who's is not named Ron.

3.

a)

Courses.Name

b) Get the name of courses which all students are enrolled.

4.

$\rho_{C3X} (\pi_{cID} (\sigma_{cID \geq 3000 \ \&\& \ cID < 4000} (Courses)))$
 $\pi_{Name} ((\pi_{sID, cID} E) \div C3X) \bowtie S$