

Task 1

$R = (A, B, C)$

$F = (AB \rightarrow C)$

$F = (C \rightarrow A)$

So we decompose to $R1 = (C, B)$ and $R2 = (C, A)$

$F = (AB \rightarrow C)$ is lost

Task 2

Unit ID	Student ID	TutorID
U1	st1	tut1
U2	st1	tut3
U1	st4	tut1
U5	st2	tut3
U4	st2	tut5

Student ID	Date	Grade
st1	23.02.2003	4,7
st1	18.11.2002	5,1
st4	23.02.2003	4,3
st2	05.05.2003	4,9
st2	04.07.2003	5

TutorID	Topic	Room	Book	Tutemail
tut1	GMT	629	Deumlich	tut1@fhbb.ch
tut3	Gln	631	Zehnder	tut3@fhbb.ch
tut3	PhF	632	Dummlers	tut3@fhbb.ch
tut5	AVQ	621	Swisstopo	tut5@fhbb.ch

Task 3

ID	ProjectNameID	ProjectManagerID
1	1	1
2	2	2

ProjectNameID	ProjectName	TeamSize	Budget
1	Project1	15	1 kk \$
2	Project2	12	1,5 kk \$

ProjectManagerID	ProjectManager	Postiton
1	Manager1	CTO
2	Manager2	CTO2

Task 4

Group	Faculty	Speciality
g1	f1	s1
g2	f2	s2

Faculty	Speciality
f1	s1
f2	s2

Speciality	Group
s1	g1
s2	g2

Task 5

ProjectID	Department	Curator	TeamId
p1	d1	e1	1
p2	d2	e2	2

TeamId	Teamsize	ProjectGroupNumber
1	100	5
2	120	6

Task 6

- 1) Minimization of information
- 2) Dependency preservation
- 3) Losslessness