Normalization

Given Table

student_id	subject	professor
101	C++	P.Cpp
101	Java	P.Java
102	Java	P.Java2
103	C#	P.Chash
104	Java	P.java

Above table satisfies 1NF, 2NF, 3NF

2NF - no partial dependencies

3NF - no transitive dependencies

Converting to BCNF

primary key = student_id + subject

Student Table

student_id	p_id
101	1
101	2
102	3
103	4
104	1

Professor Table

p_id	professor
1	P.Java
2	P.Cpp
3	P.Java2
4	P.Chash