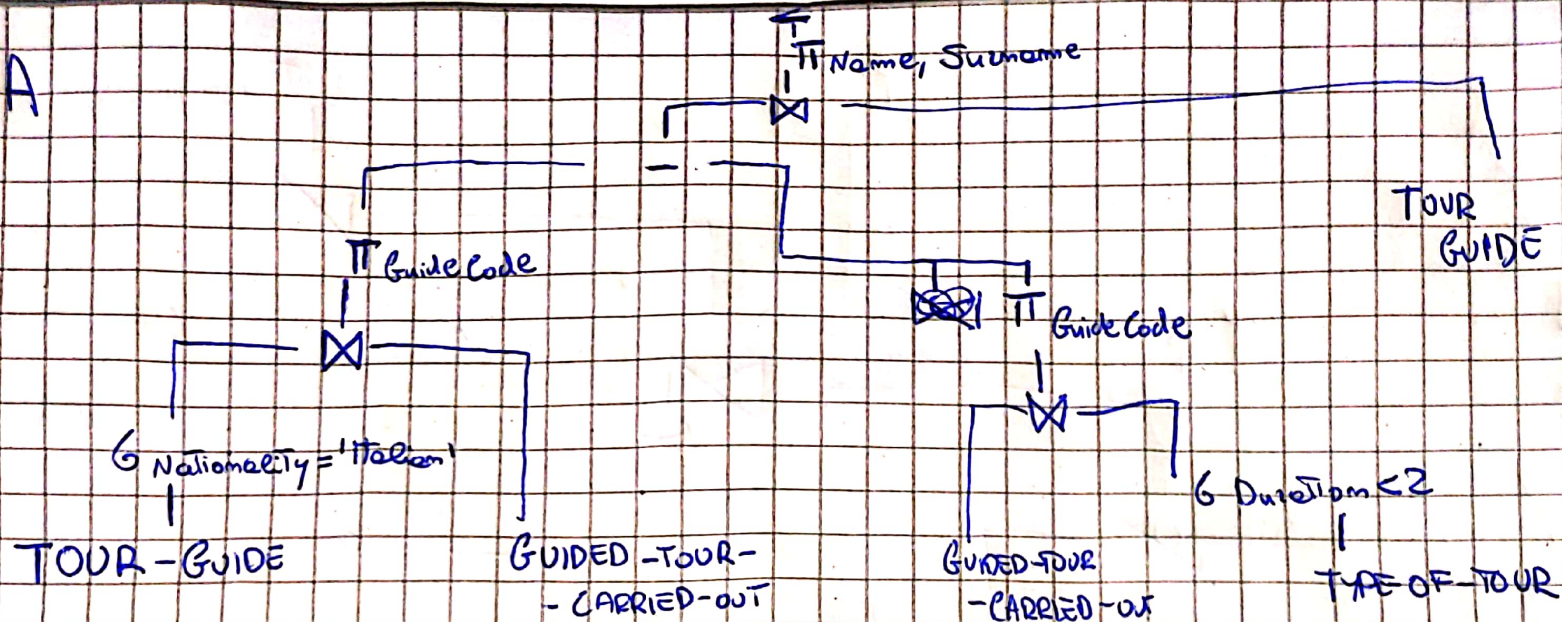
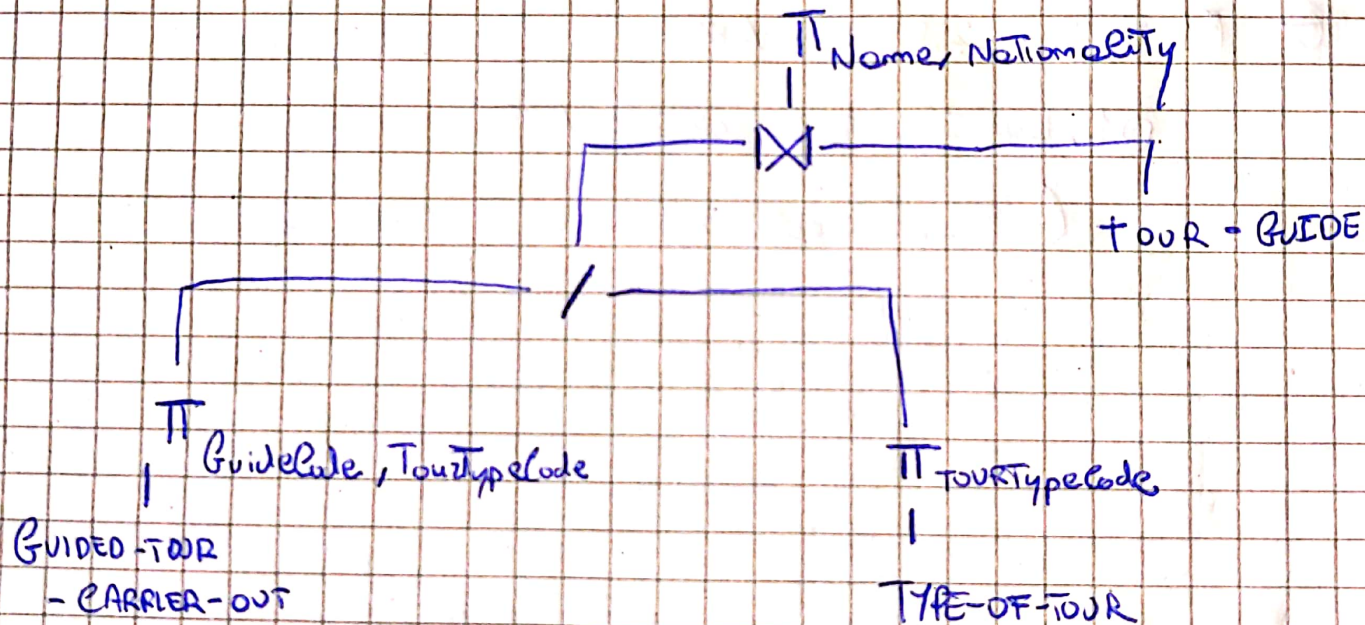


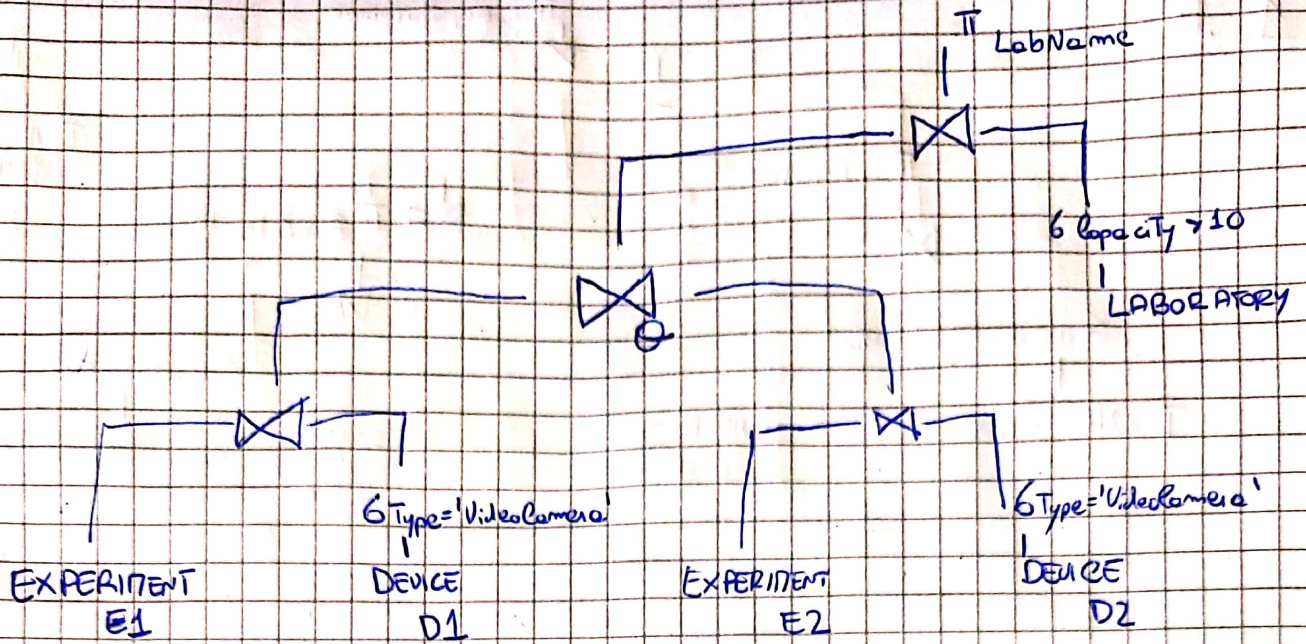
1.A



1.B



2

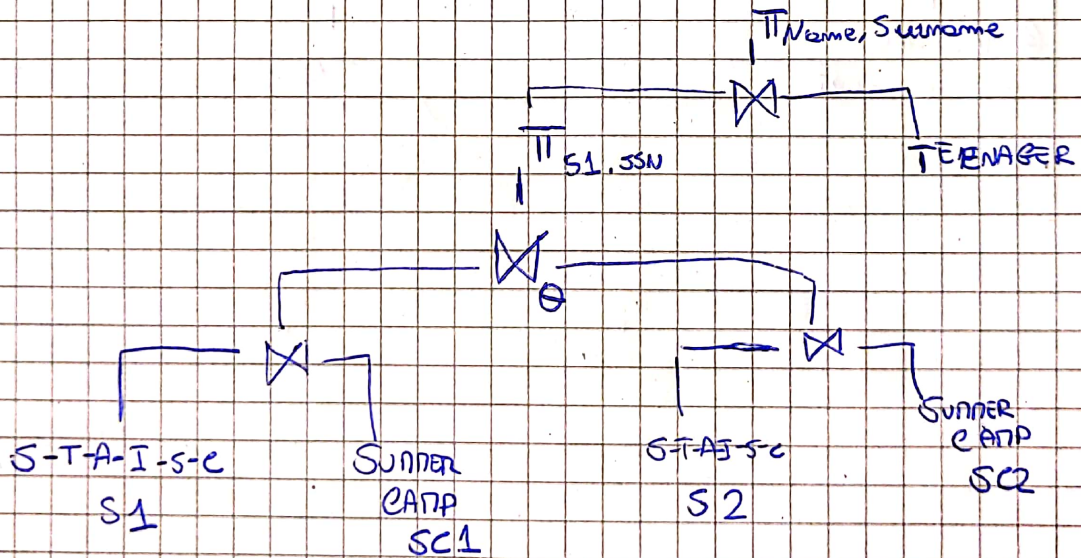


θ $E1.Date = E2.Date$ AND

$D1.LabID = D2.LabID$ AND

$(E1.DeviceID \neq E2.DeviceID \text{ OR } E1.StudentID \neq E2.StudentID)$

3



θ $S1.SubscriptionDate = S2.SubscriptionDate$ AND

$S1.SSN \neq S2.SSN$ AND

$S1.ActivityCode \neq S2.ActivityCode$ AND

$S1.CampCode \neq S2.CampCode$ AND

$SC1.City = SC2.City$