1. πFirstNameStudent
2. πFirstName, LastName(σFavoriteColor = ‘Green’ V FavoriteColor = ‘Black’ Student
3. ρJKnames(πFirstName(σFirstName = ‘J%’ V FirstName = ‘K%’ Student))
4. πFirstName, LastName(σMajor = ‘CS’ Student)
5. πFavoriteActivity(σMajor = ‘CS’ Student)
6. πLastName(Student ∩ Pet)
7. πCity(Student – Pet)
8. πFirstName(Student ∪ Pet)
9. πfName, lName(σbranchNo = ‘B003’ Staff)
10. πfName, lName(σcity = ‘Bristol’(Staff x Branch))
11. πpostcode(σfName = ‘David’ ∧ lName = ‘Ford’ ∧ Staff.branchNo = Branch.branchNo(Staff x Branch))
12. Yes, both union and intersect are supported in SQL by the keywords UNION and INTERSECT respectively.