*1.*

*π\_{Marks.StudentId} (σ\_{Plan.LecturerId = LecturerId} (Marks* ⋈*\_{Marks.CourseId = Plan.CourseId} Plan))* ⋈*\_{COUNT(DISTINCT Marks.CourseId) = COUNT(\*)} (ρ\_{COUNT(\*)} (π\_{Plan.LecturerId} (σ\_{LecturerName = 'specified\_name'} (Lecturers)) ⨝ (π\_{Plan.LecturerId} (Plan))))*

*2.*

*π\_{Students.StudentId, Students.StudentName, Groups.GroupName} (σ\_{Students.StudentId = 'specified\_id'} (Students ⋈\_{Students.GroupId = Groups.GroupId} Groups))*

*3.*

*π\_{Students.StudentId, Students.StudentName, Students.GroupId} (σ\_{Marks.Mark = 'specified\_mark'* ⋈ *Lecturers.LecturerName = 'specified\_name'} (Students* ⋈*\_{Students.StudentId = Marks.StudentId} Marks* ⋈*\_{Marks.CourseId = Plan.CourseId} Plan* ⋈*\_{Plan.LecturerId = Lecturers.LecturerId} Lecturers))*

*4.*

*π\_{Students.StudentId, Students.StudentName, Students.GroupId} (σ\_{Students.StudentId* ⋈ *(π\_{StudentId} (σ\_{CourseName = 'specified\_course'} (Marks* ⋈*\_{Marks.CourseId = Courses.CourseId} Courses)))} (Students))*

*5.*

*πStudentName*,*CourseName*​(*σGroupId*=*GroupId*​(*Students*⋈*CourseId*=*CourseId*​*Plan*⋈*LecturerId*=*LecturerId*​*Lecturers*⋈*CourseId*=*CourseId*​*Courses*))

6.

π\_{Marks.StudentId} (σ\_{Plan.LecturerId = LecturerId} (Marks ⋈\_{Marks.CourseId = Plan.CourseId} Plan)) ÷ π\_{Marks.StudentId} (σ\_{Plan.LecturerId = LecturerId} Plan) ÷ π\_{COUNT(\*)} (Plan) ⋈\_{COUNT(DISTINCT Marks.CourseId) = COUNT(\*)} (ρ\_{COUNT(\*)} (π\_{Plan.LecturerId} (σ\_{LecturerName = 'specified\_name'} (Lecturers)) ⋈ π\_{Plan.LecturerId} (Plan)))

7.

*πGroupName*,*CourseName*​((*πGroupId*,*CourseId*​(*Groups*×*Courses*))−(*πGroupId*,*CourseId*​(*Students*×*Courses*)−*πStudentId*,*CourseId*​*Marks*))

9.

*ρTemp*​(*πStudentName*,*AVG*(*Mark*)​(*Students*⋈*StudentId*=*StudentId*​*Marks*),*AVG*(*Mark*)→*AvgMark*)

10.

*ρTemp*1​(*πStudentId*,*COUNT*(*CourseId*) *as* *Total*​(*Marks*),*COUNT*(*CourseId*) *to* *Total*)

*ρTemp*2​(*πStudentId*,*COUNT*(*Mark*) *as* *Passed*​(*σMark*=*NULL*​(*Marks*)),*COUNT*(*Mark*) *to* *Passed*)

*ρTemp*3​(*πStudentId*,*COUNT*(*Mark*) *as* *Failed*​(*σMark*=*NULL*​(*Marks*)),*COUNT*(*Mark*) *to* *Failed*)

*Temp*1⋈*Temp*2⋈*Temp*3