Recursive Closure Operations

- Student_1(sname,admnno, leader_admnno)

- Students in each class are grouped into several groups and each group has a representative. Representatives of each branch is formed into a higher level group and has a representative of branch. Branch representatives are formed into another group and has a representative

- An example of a recursive operation is to retrieve all representatives s of a students s at all levels—that is, all students s ′ directly represented by s , all s ″ students directly represented by each students s ′ all students s ‴directly represented by each students s ″ and so on.

- Gautham_Admnno← $\pi_{admnno}(\sigma_{sname=\text{“Gautham”}}($Student))
- leaders(admn1, admn2) ← $\pi_{admnno\ ,\ leader\_admnno}$(Student)
- RESULT1(admn1) ← $\pi_{admnno1(}$Gautham_Admnno ⋈ $_{admn2=Admnno}$ leaders)
- To retrieve all students represented by Gautham at level 2—that is, all students s” represented by some students s ’ who is directly represented by Gautham—we can apply another JOIN to the result of the first query, as follows:
- RESULT2 (admn1) ← $\pi_{admnno1(}$RESULT1 ⋈ $_{admn2=Admnno}$ leaders)
- RESULT ← RESULT2 ∪ RESULT