Practice Question

- Student(sName,RollNo,Class,AdmNNo)
- Course(CourseName,Cid,offereddept)
- CourseRoom(Cid,RoomNo)
- Faculty(Fname,Fid,F.Dept)
- Department(Dname, Did,HoD)
- Room(Roomno,RoomLocation)
- Platform(PlatformName, Link,Cid)
- Subtaught(Fid,Cid,Modeofteach)

Create a relational algebra query to get the names of the subjects that the EC HoD is handling.

- 1. Write the query using cartesian product
- 2.Write the query using join
- 3. Write the query using join

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Hod details $\leftarrow$ $\sigma_{\text{faculty.Fid=Department.Hod}}$**(Faculty** $\times$ **Department)**

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Hod details ← $\sigma_{\text{faculty.Fid=Department.Hod}}$**(Faculty** × **Department)**

EC Hod details ← $\sigma_{\text{Department.Did="EC"(}}$**(Hod details))**

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Hoddetails ← $\sigma_{faculty.Fid=Department.Hod}$(Faculty × Department)

ECHoddetails ← $\sigma_{Department.Did="EC"}(\sigma_{faculty.Fid=Department.Hod}$(Hod details))

SubjectidofECHOD ← $\sigma_{subjecttaught.Fid=ECHod.Fid}$ (Subjecttaught × ECHoddetails

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ECHoddetails ← $\sigma_{Department.Did="EC"}(\sigma_{faculty.Fid=Department.Hod}$(Hod details))

SubjectidofECHOD ← $\sigma_{subjecttaught.Fid=ECHod.Fid}$ (Subjecttaught × ECHoddetails)

Result ← $\pi_{Course.Coursename}(\sigma_{SubjectidofECHod.Cid=Course.cid}$ (SubjectidofECHOD × Course))

Find the name of all courses offered by Biomedical department

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Find the name of all courses offered by Biomedical department

- Course(CourseName,Cid,offereddept)
- Department(Dname, Did,HoD)

- $\pi_{Coursename}(\sigma_{department.Dname=\text{“Biomedical”}}(\sigma_{Course.offeredDept=Department.Did}(Course \times Department))$

Find the name of all online courses offered by Biomedical department

Find the department names that use the same platforms as the electrical department.

- Use Division