

### INTRODUCTION

**TOPIC:** 

TRANSLATING EER DIAGRAM TO RELATIONAL SCHEMAS

YOU ALREADY KNOW WE HAVE LEARNED ABOUT 4 OPTIONS TO TRANSLATING EER DIAGRAM TO RELATIONAL SCHEMAS

IN THIS PRESENTATION WE ARE GOING TO DISCUSS 5 QUESTION RELATED ABOUT THIS TOPIC











### **GROUP MEMBERS**

PCM Dharmasiri- 2021/ASP/24

H.P.N.Isuranga Herath – 2021/ASP/15

V.Banuyah – 2021/ASP/43

K.Sukikaran – 2021/ASP/46

J.H.A.P.Perera – 2021/ASP/60

U.W.A. Samadhi Keshala - 2021/ASP/63

S.Thushjanthan - 2020/ASP/78

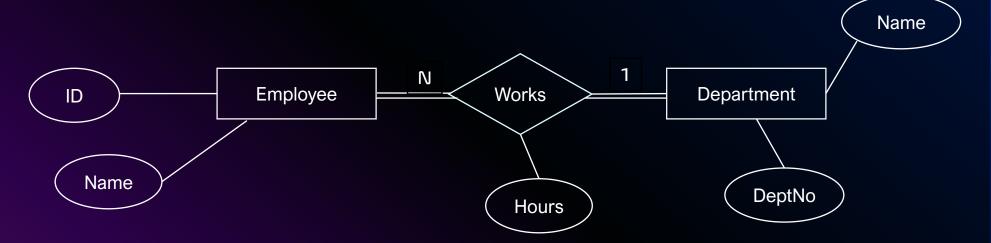


# V.BANUYAH2021/ASP/43

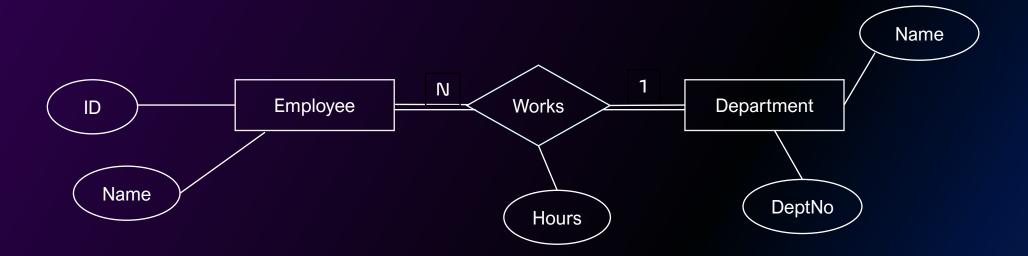
### #1 EER DIAGRAM Name 0 N Employee Works Department Name DeptNo Hours d Hourly\_Emp Contract\_Emp 0 Start\_Date Rate

### Q1 STEP 1: MAPPING REGULAR ENTITIES

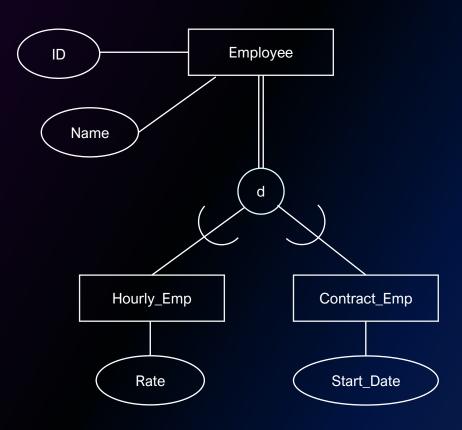
- Employee(ID, Name)
- Department(<u>DeptNo</u>, Name)



## Q1 STEP 4: 1:N BINARY RELATIONSHIPS Employee(ID, Name, Hours, DeptNo)



BA
Hourly\_Emp(ID, rate)
Contract\_Emp(ID, Start\_Date)

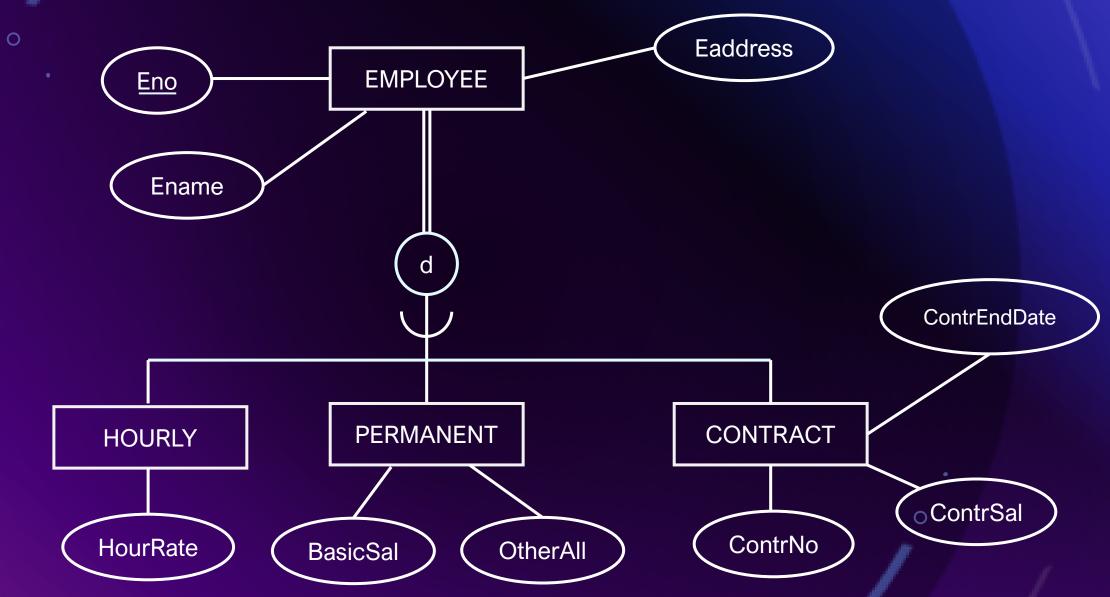


### #1 FINAL RELATIONAL SCHEMA

- 1 Employee(ID, Name, DeptNo, Hours)
- 3 Department(<u>DeptNo</u>, Name)
- 4 Hourly\_Emp(ID, Rate)
- 5 Contract\_Emp(ID, Start\_Date)

# SAMADHI KESHALA 2021/ASP/63

### #2 EER DIAGRAM



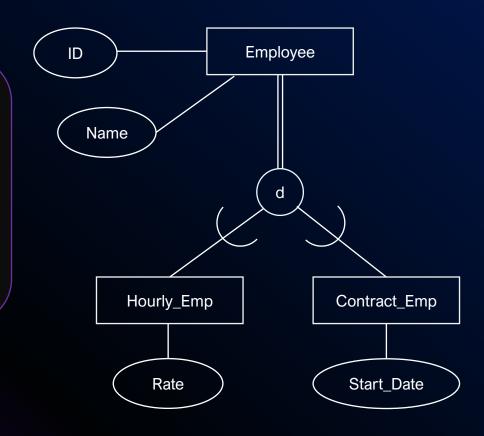
### Q2 STEP 1: MAPPING REGULAR ENTITIES

• Employee(Eno, Ename, Eaddress)



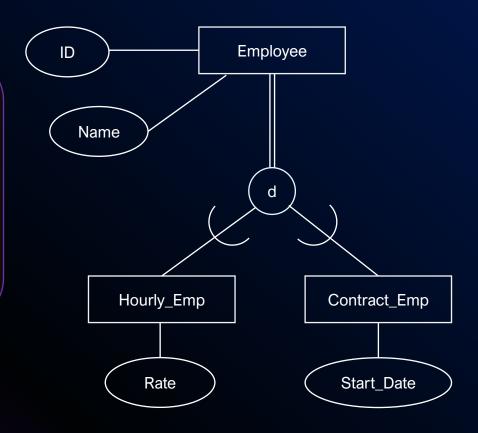
### **8A**

- EMPLOYEE(<u>Eno</u>, Ename, Eaddress
- HOURLY(<u>Eno</u>, HourRate)
- PERMANENT(<u>Eno</u>, BasicSal, OtherAll)
- CONTRACT(<u>Eno</u>, ContrNo, ContrSal, ContrEndDate)



### 8B

- Hourly(<u>Eno</u>, Ename, Eaddress, HourRate)
- Permanent(<u>Eno</u>, Ename, Eaddress, BasicSal, OtherAll)
- Contract(<u>Eno</u>, Ename, Eaddress, ContrNo, ContrSal, ContrEndDate)

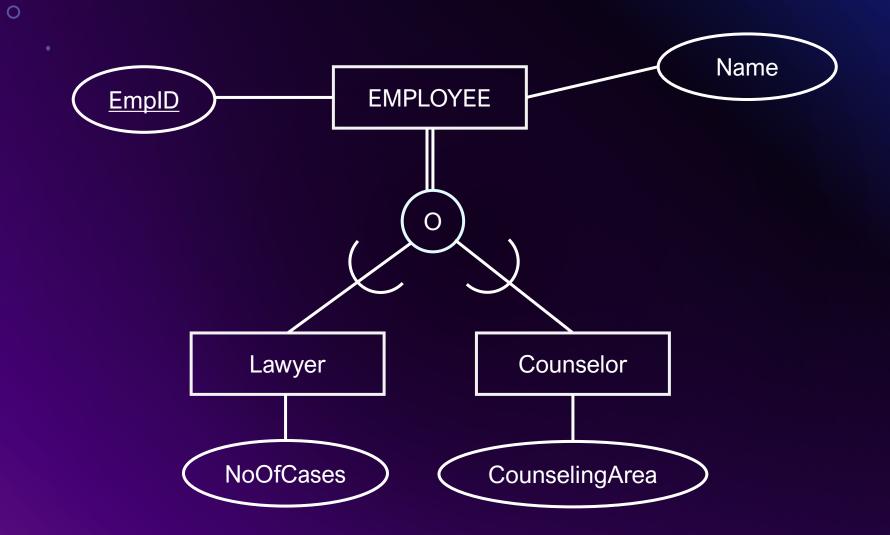


### #2 FINAL RELATIONAL SCHEMA

- Hourly(<u>Eno</u>, Ename, Eaddress, HourRate)
- Permanent(<u>Eno</u>, Ename, Eaddress, BasicSal, OtherAll)
- Contract(Eno, Ename, Eaddress, ContrNo, ContrSal, ContrEndDate)

# AMAYA PERERA 2021/ASP/60

### #3 EER DIAGRAM



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### Q2 STEP 1: MAPPING REGULAR ENTITIES

Employee(EmplD, Name)

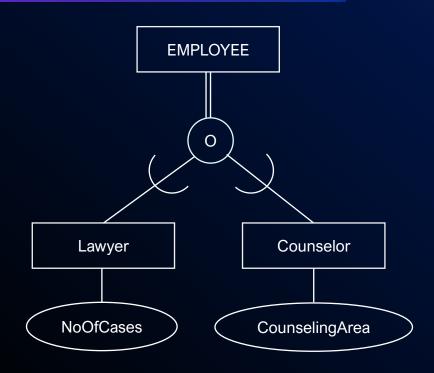


### **8A**

- Employee (EmplD, Name)
- Lawyer(<u>EmpID</u>, NoOfCases)
- Counselor(<u>EmpID</u>, CounselingArea)

### 8D

 Employee(<u>EmpID</u>, Name, Lflag, NoOfCases, Cflag, CounselingArea)

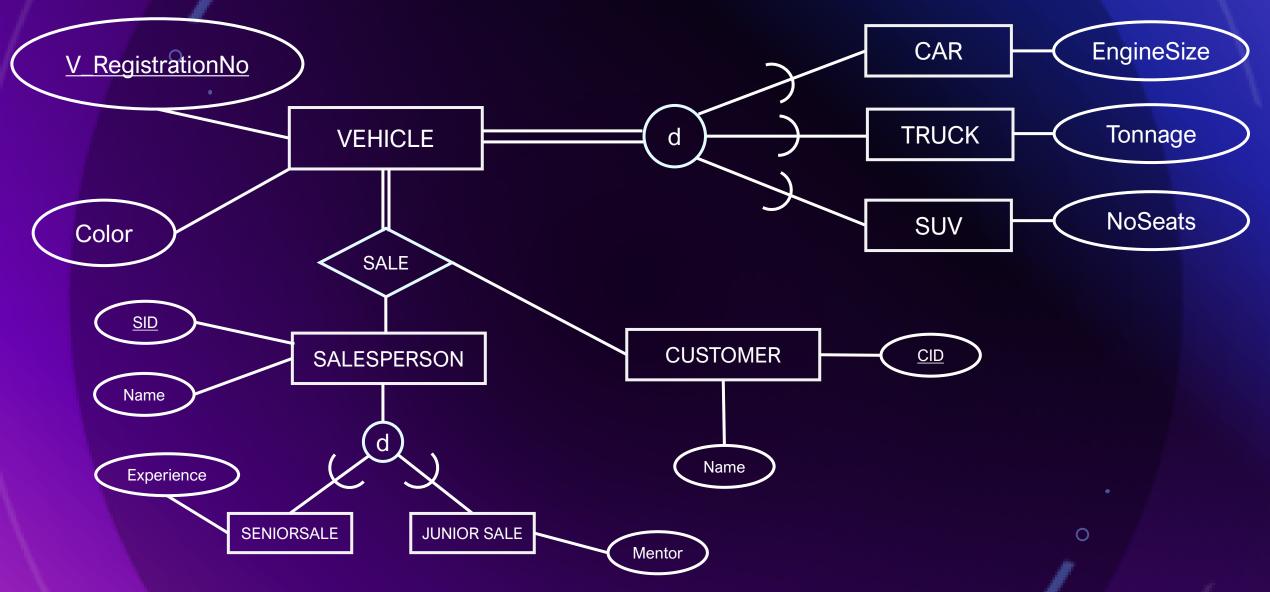


### #3 FINAL RELATIONAL SCHEMA

- Employee (EmplD, Name)
- Lawyer(<u>EmpID</u>, NoOfCases)
- Counselor(EmpID, CounselingArea)

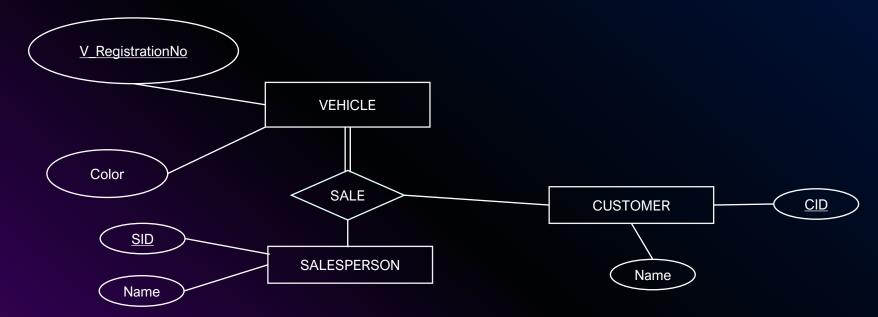
# K.SUKIKARAN & THUSHJANTHAN 2021/ASP/46 2020/ASP/78

### #4 EER DIAGRAM



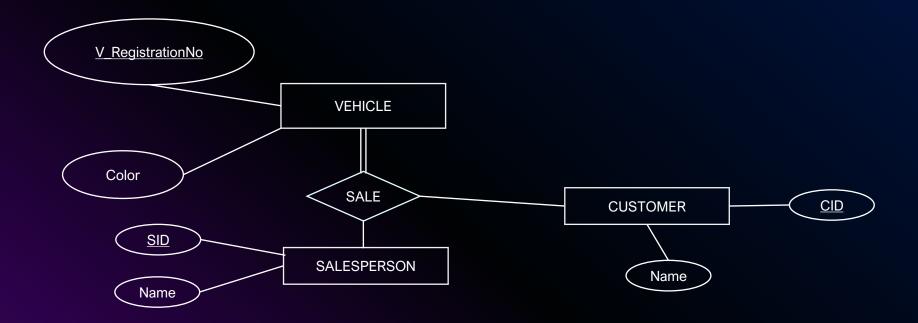
### Q4 STEP 1: MAPPING REGULAR ENTITIES

- VEHICLE(<u>V\_RegistrationNo</u>,Color)
- SALESPERSON(<u>SID</u>,Name)
- CUSTOMER(CID, Name)



### Q4 STEP 7: MAPPING N-ARY RELATIONSHIP TYPES

SALE(<u>V\_RegistrationNo,SID,CID</u>)

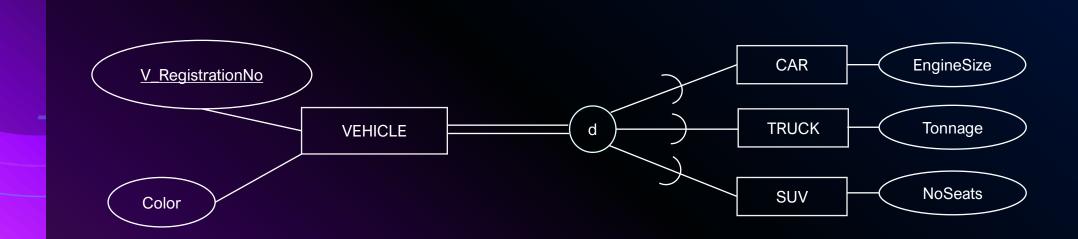


### 8B

- CAR(<u>V\_RegistrationNO</u>, Colour,EngineSize)
- TRUCK(<u>V\_RegistrationNO</u>, Colour,Tonnage)
- SUV(<u>V\_RegistrationNO</u>, Colour, NoSeats)

### 8C

 VEHICLE(<u>V\_RegistrationNO</u>, Color, Vtype, EngineSize, Tonnage, NoSeats)



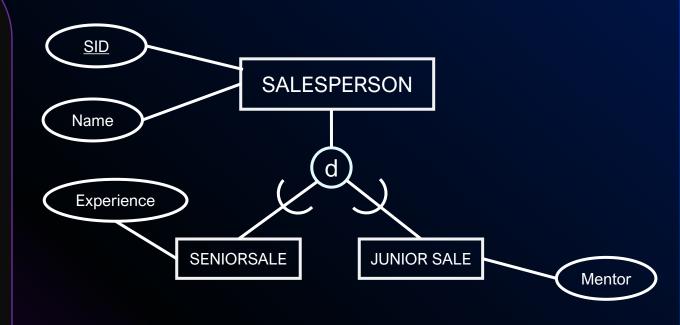
### **8A**

- SALE SPERSON(<u>SID</u>, Name)
- SENIORSALE(<u>SID</u>, Experience)
- JUNIORSALE(SID, Mentor)

OR

### **8C**

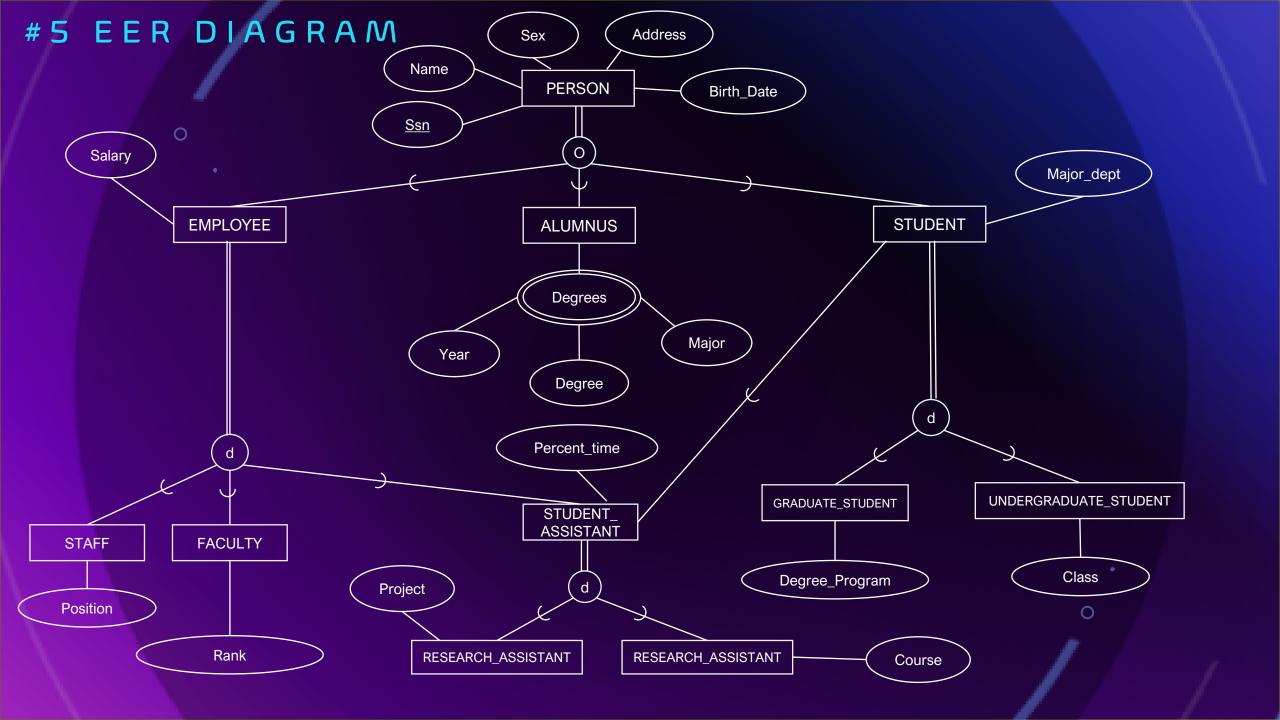
 Sale Person(<u>SID</u>, Name, Type, Experience, Mentor)



### FINAL SCHEMA

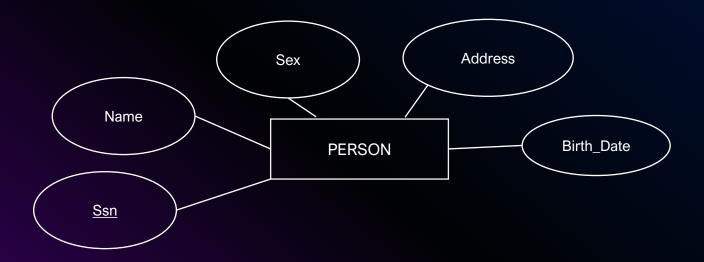
- CUSTOMER(<u>CID</u>, Name)
- SALE(V\_RegistrationNo, SID, CID)
- CAR(V\_RegistrationNO, Color, EngineSize)
- TRUCK(V\_RegistrationNO, Color, Tonnage)
- SUV(<u>V\_RegistrationNO</u>, Color, NoSeats)
- Sale Person(SID, Name, Type, Experience, Mentor)

# ISURANGA HERATH & CHATHURA MAHESH 2021/ASP/15 2021/ASP/24



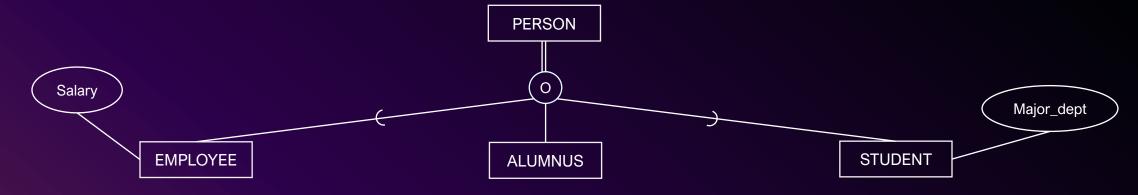
### Q5 STEP 1: MAPPING REGULAR ENTITIES

PERSON(<u>Ssn</u>, Name, Sex, Address, Birth\_date



### **8A**

- PERSON(<u>Ssn</u>, Name, Sex, Address, Birth\_date)
- EMPLOYEE(<u>Ssn</u>, Salary)
- Student(<u>Ssn</u>, Major\_dept)
- Alumnus(<u>Ssn</u>)
- AlumnusDegree(<u>Ssn</u>, Year, Degree, Major)



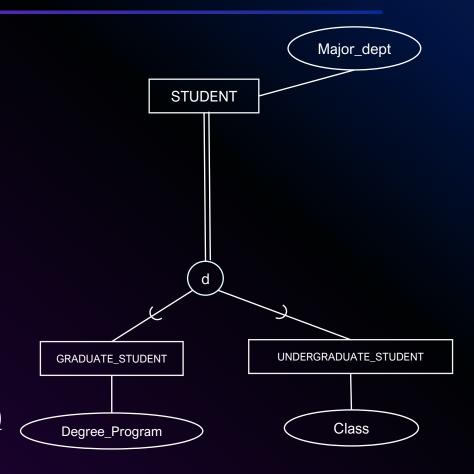
### **8A**

- STUDENT(<u>Ssn</u>, Major\_dept)
- GRADUATE\_STUDENT(<u>Ssn</u>, Degree\_program)
- UNDERGRADUATE\_STUDENT(<u>Ssn</u>, Class)

OR

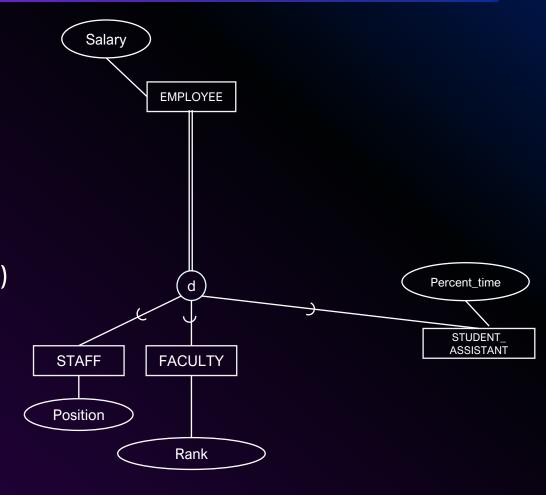
### **8C**

STUDENT(<u>Ssn</u>, <u>Major\_dept</u>, <u>Type</u>, <u>Degree\_program</u>, <u>Class</u>)



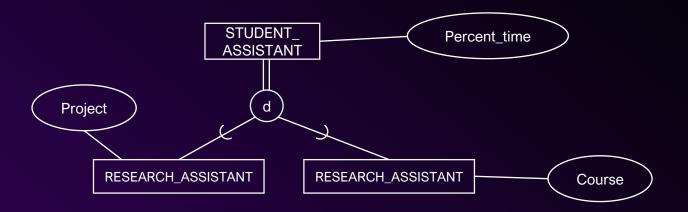
### **8A**

- EMPLOYEE(<u>Ssn, Salary</u>)
- STAFF(<u>Ssn</u>, Position)
- FACULTY(<u>Ssn</u>, Rank)
- STUDENT\_ASSISTANT(<u>Ssn</u>, Precent\_time)



### **8C**

STUDENT\_ASSISTANT(<u>Ssn</u>, Salary, Major\_dept, Type, Project, Course, Percent\_time)



### FINAL SCHEMA

- PERSON(<u>Ssn</u>, Name, Sex, Address, Birth\_date)
- EMPLOYEE(<u>Ssn</u>, Salary)
- Alumnus(<u>Ssn</u>)
- AlumnusDegree(<u>Ssn</u>, Year, Degree, Major)
- STUDENT(Ssn, Major\_dept, Type, Degree\_program, Class)
- STAFF(<u>Ssn</u>, Position)
- FACULTY(<u>Ssn</u>, Rank)
- STUDENT\_ASSISTANT(<u>Ssn</u>, Percent\_time , Type, Project, Course)

# ANY QUESTION?

# THANK YOU!

SQL quries



Via GitHub

PDF



Via Google Drive

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