Stored Procedures - Practice

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EduBD

student(**student_id**, first_name, last_name, dob, gender, address, note, *class_id*)

subject(**subject_id**, name, credit, percentage_final_exam)

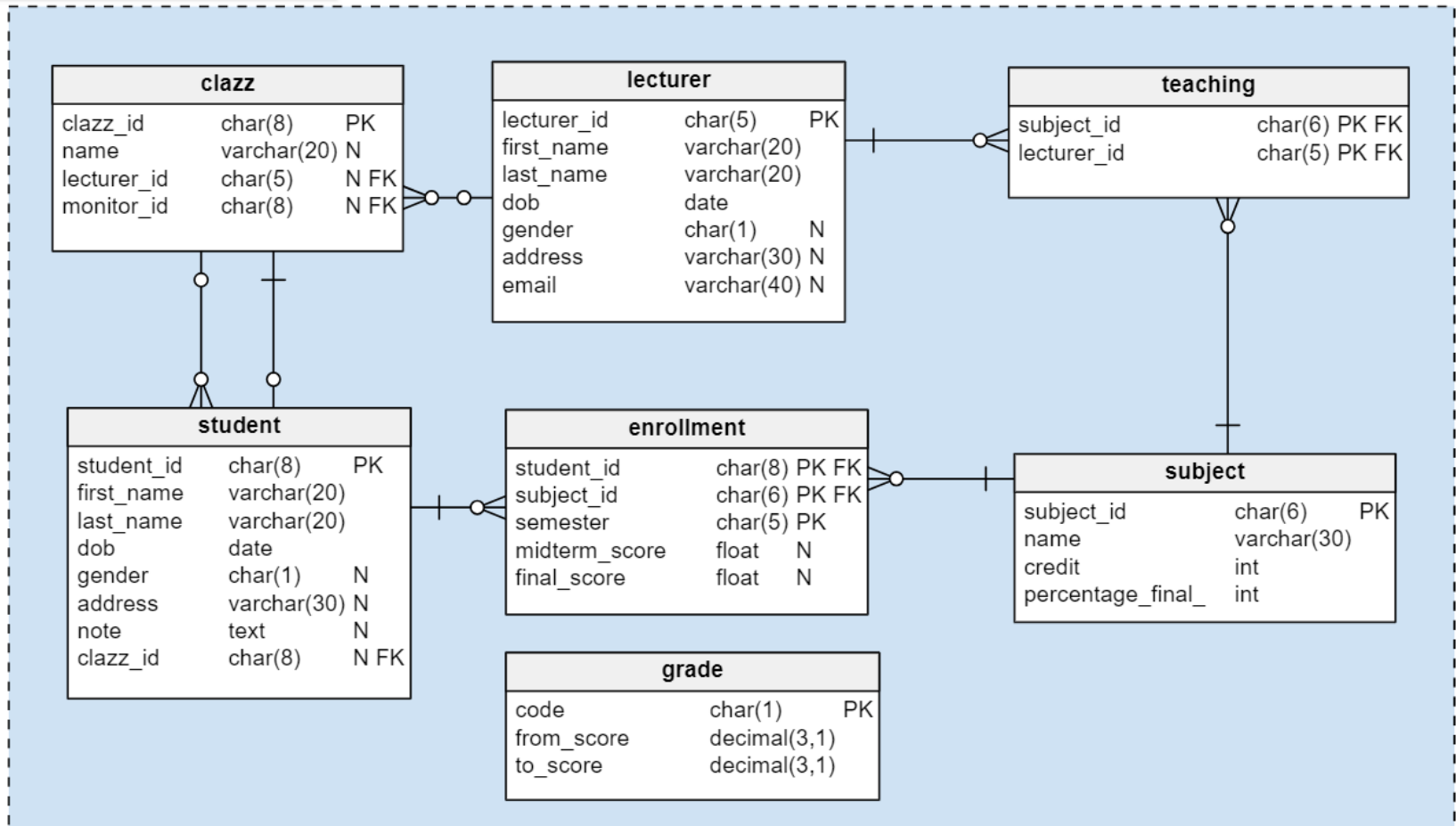lecturer(**lecturer_id**, first_name, last_name, dob, gender, address, email)

teaching(***subject_id, lecturer_id***)

grade(**code**, fromScore, toScore)

clazz(**clazz_id**, name, *lecturer_id*, *monitor_id*)

enrollment(***student_id, subject_id, semester,*** midterm_score, final_score)

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clazz
clazz_id	char(8)	PK
name	varchar(20)	N
lecturer_id	char(5)	N FK
monitor_id	char(8)	N FK

lecturer
lecturer_id	char(5)	PK
first_name	varchar(20)	
last_name	varchar(20)	
dob	date	
gender	char(1)	N
address	varchar(30)	N
email	varchar(40)	N

teaching
| subject_id | char(6) PK FK |
| lecturer_id | char(5) PK FK |

student
student_id	char(8)	PK
first_name	varchar(20)	
last_name	varchar(20)	
dob	date	
gender	char(1)	N
address	varchar(30)	N
note	text	N
clazz_id	char(8)	N FK

enrollment
student_id	char(8) PK FK
subject_id	char(6) PK FK
semester	char(5) PK
midterm_score	float	N
final_score	float	N

subject
subject_id	char(6)	PK
name	varchar(30)	
credit	int	
percentage_final_	int	

grade
code	char(1)	PK
from_score	decimal(3,1)	
to_score	decimal(3,1)	

3

Define a function

- Write a function computing the number of students for a given class ID

- Try to call this function from superuser account

Execute a function with normal role

- Define an user role named : *joe*; pass: *12345678*

- Login with **joe** account ➔**execute** this function

- Login with superuser => **Grant** execute privilege on this function to joe

- Login with **joe** account => **Execute**

Exercice

- Add a new attribute (named: number_students, data type: integer) on clazz table to store number of students in class.

- Define a function (named *update_number_students()*) that computes the number of students for each class and update the correct value for number_students attribute.

- Check values in this attribute before and after calling the function *update_number_students()*