

PRACTICAL EXAMINATION

Subject code: DB1202 – Summer 2023

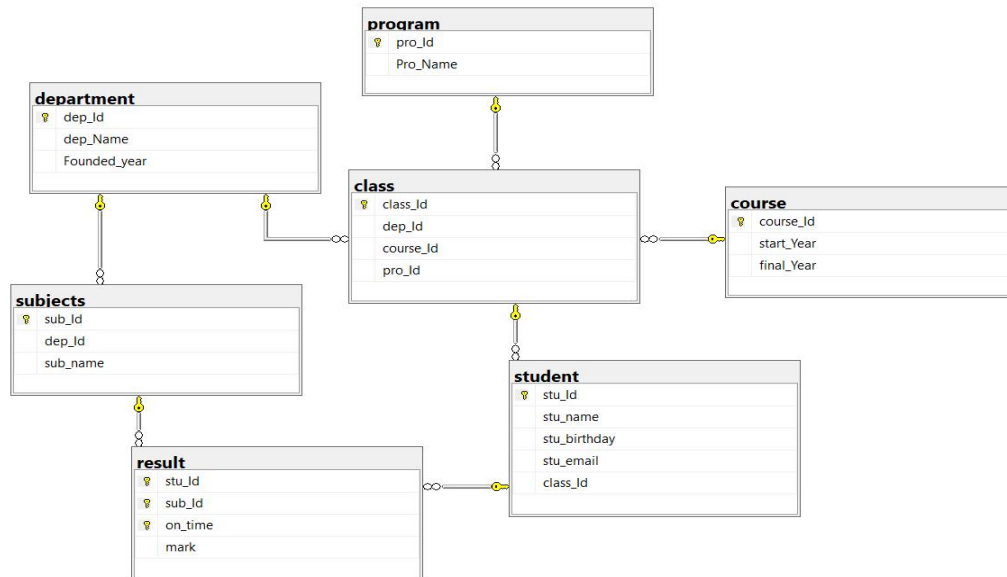
Duration : 90 minutes

Requirements:

- + Write the code on 1 file, named the file using your student ID: **studentName_code.sql**
- + The **Student management** project was surveyed and physically installed the database with the name: **DB1202_SU23_PE**. The database is backed up to **DB1202_SU23_PE.bacpac**, let's import this file into the **Microsoft SQL Server environment**.

A. Students read the survey and analyze the project to understand the informations:

- Each department has a department code to manage, a department name, and the year was founded.
- Each course has a code to manage, the start year, and the final year of the course
- Each course program has a management code and a program name (formal and informal)
- A class has a class code to manage, belongs to a department, and is open to a course, with a program
- Each student has a code to manage and belongs to a certain class (identified by **class_Id**)
- Each subject has a code to manage and belongs to a department (identified by **dep_Id**)
- The result is the score of the student who took the test for a subject (1 student: **1 subject / one time**_lượt thi)

**B. Let's import DB1202_SU23_PE.bacpac file to SQL Server Database and write SQL queries to make requests:****1) Let's add data for the tables (2 mark)**

Example.

Table class

class_Id	dep_Id	course_Id	pro_Id
SE15C01	IT	CSE15	FE
AI15B01	IT	CAI15	FE
MK17A01	MK	CMK17	FE
BIZ17B01	BIZ	CBIZ17	FE

Table student

stu_Id	stu_name	stu_birthday	stu_email	class_Id
SE150023	Nguyễn Quốc Khang	2001-10-15	khangnq@fpt.edu.vn	SE15C01
SE150040	Lê Quang Minh Đà	2000-01-01	dalqm@fpt.edu.vn	SE15C01
AI152541	Lê Võ Bảo Duy	2002-05-20	duylvb@fpt.edu.vn	AI15B01
AI152007	Võ Hoàng Nguyên	2001-01-31	nguyenvh@fpt.edu.vn	AI15B01
MK175489	Trương Việt Hoàng	2001-02-23	hoangtv@fpt.edu.vn	MK17A01
MK175694	Phan Thị Minh Phương	2000-05-05	phuongptm@fpt.edu.vn	MK17A01
BIZ179420	Thân Đức Quang Vinh	2000-07-26	vinhtdq@fpt.edu.vn	BIZ17B01
BIZ175642	Lương Gia Khánh	2001-06-27	khanhlg@fpt.edu.vn	BIZ17B01

Table subjects

sub_Id	sub_name	dep_Id
DBI202	Database Systems_Các hệ cơ sở dữ liệu	IT
PRF192	Programming Fundamentals_Cơ sở lập trình	IT
ECO111	Microeconomics_Kinh tế vi mô	MK
MKT101	Marketing Principles_Nguyên lý Marketing	MK
OBE102c	Organizational Behavior_Hành vi tổ chức	BIZ
CHN111	Elementary Chinese 1_Hán ngữ sơ cấp 1	BIZ

Table result

stu_Id	sub_Id	on_time	mark
SE150023	DBI202	1	9
SE150040	DBI202	1	6.5
AI152541	DBI202	1	8
AI152007	DBI202	1	7
MK175489	ECO111	1	8
MK175694	MKT101	1	9
BIZ179420	OBE102c	2	9
BIZ175642	CHN111	1	8
SE150023	PRF192	2	7.5
BIZ179420	CHN111	1	8

2) Make the following queries:(8 mark)

- Display a list of students from the department: Công nghệ thông tin (1 mark)
- Display class score information: MK17A01 (1 mark)

c) Indicates course information starting in 2021. (1 mark)

Required information: class code, class name, and department name

d) Find the students with the highest mark and take the exam on the 1st (on_time = 1) (1.5 mark)

Display information: student ID, student name, date of birth

e) Please indicate the number of students in each department, and sort them in descending order by number of students (1.5 mark)

f) Using stored procedure to print a list of students in a class (2 mark)

- Must have class code
- Find all students by class code

-----The end-----

Attention: Students have access to electronic documents stored on their personal computers, which are used to take the PE.