

National University of Computer and Emerging Sciences



In Lab Exercise 3

“Introduction to MS SQL Server , DML and DDL”

Database Systems

Spring 2018

Department of Computer Science
FAST-NU, Lahore, Pakistan





Exercise

Create a database of Store, the schema is shown in following figure, Name the database as Store<yourRollNo>

Q1: create all the tables and add all the rows.

Q2: Identify one PK from each table and add the constraint

Q3: Identify all the FK constraints, and add those constraints, such that:

- If the Departments table or Students table or Instructor table is updated the referencing columns should also reflect the changes.
- Department should not be deleted if the details of that order is present.

Q4: Alter table Student by adding new column “warning count” and deleting “Sr.no.” Column

Q5: Perform the following DML actions on your database, identify whether these operations are valid or not, also state how can we make the invalid queries valid? (Your answers should be written in comments along with your queries)

- Add new row into students values <1162334, Fozan Shahid, CS, 3.2 >
- Add new row into Instructor values <1,12, Ramin Rana, Computer Science>
- Update departments table Change department code of 1CV to CE and ID of Department Civil Engineering to 1CVE
- Delete course with Name ‘Programming’
- Delete Student with name “Faisal khan” and whose department is CS

Bonus Questions:

- Alter table and add unique constraint
- Alter Credit hours table and set its limit to 1 to 3

Sr.No.	Reg_no.	Name	Department
1	L164214	Ahmad Khalid	CS
2	L164112	Faisal Khan	EE
3	L164001	Shahid Abbas	CV

Table 1: students

Sr.No.	Course Id	Course Name	Credit Hours
1	C11	Programming	3
2	E4	Circuit Analysis	3
3	CV8	Material Engineering	3

Table 2: courses

Sr.No.	Instructor ID	Instructor Name	Department
1	12	Ishaq Raza	Civil
2	22	Zareen Alamgir	Electrical
3	32	Habib Ullah	Computer Science

Table 3: instructor

Sr.No.	Department ID	Department Name	Department Code
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1	1C	Computer Science	CS
2	1E	Electrical	EE
3	1CV	Civil	CV

Table 4: Departments