**LAB 2 BOGDAN TATU**

create sequence student\_course\_seq

    start with 1

    increment by 1

    nocycle

    nocache

    noorder;

*-- CREATE SIGNUP TABLE*

create table "SIGNUP" (

    "ID" number(10, 0) default student\_course\_seq.nextval,

    "STUDENT\_ID" varchar2(10),

    "COURSE\_ID" number(4, 0),

    "YEAR" date,

    constraint "SIGNUP\_PK" primary key ("ID"),

    constraint "SIGNUP\_FK\_STUDENT" foreign key ("STUDENT\_ID") references "STUDENT" ("ID") on delete cascade,

    constraint "SIGNUP\_FK\_COURSE" foreign key ("COURSE\_ID") references "COURSE" ("ID") on delete cascade,

    constraint "DUPLICATE\_SIGNUP" unique ("STUDENT\_ID", "COURSE\_ID", "YEAR")

)

*-- CREATE GRADE TABLE*

create table "GRADE" (

    "STUDENT\_ID" varchar2(10),

    "COURSE\_ID" number(4, 0),

    "DATE" date,

    "ELP" char(1),

    "VALUE" number(3,1),

    constraint "GRADE\_FK\_STUDENT" foreign key ("STUDENT\_ID") references "STUDENT" ("ID") on delete cascade,

    constraint "GRADE\_FK\_COURSE" foreign key ("COURSE\_ID") references "COURSE" ("ID") on delete cascade,

    constraint "GRADE\_CK\_ELP" check ("ELP" in ('E', 'L', 'P')),

    constraint "GRADE\_CK\_VALUE" check ("VALUE" between 1 and 10)

)

*-- INSERT IN DEPARTMENT*

insert into "DEPARTMENT"

values (1, 'Computers', 'AC')

insert into "DEPARTMENT"

values (2, 'Electronics', 'ETcTi')

*-- INSERT IN TEACHER*

insert into "TEACHER"

values ('P1.100.111', 'Ion', 'Stanescu', 4200.57, 2)

insert into "TEACHER"

values ('P1.105.254', 'Joe', 'Mayor', 3895.11, 1)

*-- INSERT IN STUDENT*

insert into "STUDENT"

values ('LM6-10.425', 'Ioan', 'Popescu', 3, 1)

insert into "STUDENT"

values ('LM2-12.891', 'Andrei', 'Floraru', 2, 1)

insert into "STUDENT"

values ('LM8-16.112', 'Ioan', 'Popescu', 1, 2)

insert into "STUDENT"

values ('LM8-18.112', 'Razvan', 'Bratu', 4, 2)

*-- INSERT IN COURSE*

insert into "COURSE"

values (1, 'Electrice Engines', 'P1.100.111', 5)

insert into "COURSE"

values (2, 'Programming', 'P1.105.254', 4)

insert into "COURSE"

values (3, 'OOP', 'P1.105.254', 4)

*-- INSERT IN SIGNUP*

insert into "SIGNUP" ("STUDENT\_ID", "COURSE\_ID", "YEAR")

values ('LM6-10.425', 2, TO\_DATE('2019', 'yyyy'))

insert into "SIGNUP" ("STUDENT\_ID", "COURSE\_ID", "YEAR")

values ('LM8-16.112', 1, TO\_DATE('2021', 'yyyy'))

insert into "SIGNUP" ("STUDENT\_ID", "COURSE\_ID", "YEAR")

values ('LM2-12.891', 3, TO\_DATE('2020', 'yyyy'))

insert into "SIGNUP" ("STUDENT\_ID", "COURSE\_ID", "YEAR")

values ('LM8-18.112', 1, TO\_DATE('2019', 'yyyy'))

*-- INSERT IN GRADE*

insert into "GRADE"

values ('LM6-10.425', 2, CURRENT\_DATE, 'E', 9)

insert into "GRADE"

values ('LM6-10.425', 2, CURRENT\_DATE, 'L', 7)

insert into "GRADE"

values ('LM6-10.425', 2, CURRENT\_DATE, 'L', 10)

*-- DELETE FROM STUDENT*

delete from "STUDENT"

where "NAME" = 'Razvan'

    and "SURNAME" = 'Bratu'

    and "DEPARTMENT" = 2;

*-- UPDATE GRADE*

update "GRADE"

set "VALUE" = "VALUE" + 1

where "VALUE" < 10

    and "ELP" = 'L'

*-- JOIN STUDENT, DEPARTMENT, TEACHER, COURSE TABLES*

select STUDENT.ID, COURSE.ID from STUDENT

inner join DEPARTMENT

on STUDENT.DEPARTMENT = DEPARTMENT.ID

inner join TEACHER

on TEACHER.DEPARTMENT = DEPARTMENT.ID

inner join COURSE

on COURSE.TEACHER\_ID = TEACHER.ID

where STUDENT.NAME = 'Ioan'

    and STUDENT.SURNAME = 'Popescu'

    and COURSE.NAME = 'Programming'