DATABASE DESIGN

PROJECT

Calculatoare Engleza

Anul IV

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Grupa: C.EN4.S1

1. **Enunt**

37) Să se creeze o bază de date care să ţină evidenţa bolnavilor care urmează un anumit

tip de tratament. Pentru fiecare bolnav se va reţine numele, prenumele, adresa, sexul, data

naşterii şi boala. Fiecare boală va avea un nume, comentariu, şi o serie de medicamente care

trebuie luate (fiecare medicament cu o anumită frecvenţă). Mai mulţi pacienţi pot avea acelaşi

boală, iar un pacient poate să aibă mai multe boli. De asemenea un tratament implică mai multe

medicamente, iar un medicament poate fi luat pentru mai multe boli. Există sesiuni de testare,

fiecare sesiune are o dată de începere.

1. **Cerinte**

1. Să se realizeze modelul entitate-legătură

2. Să se facă trecerea la modelul relaţional (să se detalieze operaţiile effectuate pentru

fiecare entitate în parte)

3. Să se creeze o bază de date care să conţină:

a. Legături între tabele;

b. Integritatea referenţială pentru a efectua corect operaţiile de actualizare (adăugare,

ştergere, modificare);

c. Chei primare şi chei externe;

d. Reguli de ştergere şi modificare în cascadă pentru entităţile cu chei externe.

4. Să se verifice calitatea proiectării bazei de date cu ajutorul formelor normale (se va

normaliza baza de date până la FNBC - inclusiv).

5. Să se indexeze baza de date creată (crearea minim a unui index).

6. Să se facă testarea bazei de date prin efectuarea de diferite operaţii asupra ei. Trebuie

să existe cel puţin o interogare din fiecare tip (în total minim 15 interogări), 2 funcţii

diferite (care să nu facă un simplu select), 2 proceduri stocate, şi 1 trigger.

1. Modelul Entitate-Legatura
2. Modelul Relational
3. **Creearea bazei de date**

**Tabela Persoana**

CREATE TABLE persoana

(

cnp NUMBER(13) PRIMARY KEY,

nume CHAR(20) NOT NULL,

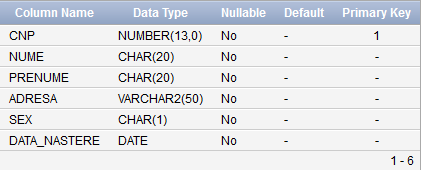
prenume CHAR(20) NOT NULL,

adresa VARCHAR2(50) NOT NULL,

sex CHAR(1) NOT NULL,

data\_nastere DATE NOT NULL

);



INSERT INTO persoana VALUES

(1801112360912,'Popescu','Marian', 'Craiova, Strada Calea Bucuresti, Nr. 8', 'M', '11-12-1980');

INSERT INTO persoana VALUES

(1900610634710,'Georgescu','Lucian', 'Craiova, Strada Mihail Kogalniceanu, Nr. 12', 'M', '06-10-1990');

INSERT INTO persoana VALUES

(1810906634710,'Sandu','Ion', 'Orsova, Strada Bujorului, Nr. 15', 'M', '09-06-1981');

INSERT INTO persoana VALUES

(1820805634710,'Burcea','Costel', 'Craiova, Strada Dezrobirii, Nr. 23', 'M', '08-05-1982');

INSERT INTO persoana VALUES

(1840603634710,'Ionescu','Gabriel', 'Craiova, Strada Rovine, Nr. 563', 'M', '06-03-1984');

INSERT INTO persoana VALUES

(1850502634710,'Varuicu','Marian', 'Hunedoara, Strada Horia, Nr. 453', 'M', '05-02-1985');

INSERT INTO persoana VALUES

(1860401634710,'Tanasie','Dorel', 'Craiova, Strada Closca, Nr. 87', 'M', '04-01-1986');

INSERT INTO persoana VALUES

(2860401634710,'Popescu','Claudia', 'Mihailesti, Strada Crisan, Nr. 17', ‘F’, '04-01-1986');

INSERT INTO persoana VALUES

(2870101634710,'Jianu','Simona', 'Craiova, Strada Panselutelor, Nr. 11', ‘F’, '01-01-1987');

INSERT INTO persoana VALUES

(2800102634710,'Neagu','Monica', 'Ploiesti, Strada Trandafirilor, Nr. 56', ‘F’, '01-02-1980');

INSERT INTO persoana VALUES

(2810103634710,'Neagoe','Iuliana', 'Ploiesti, Strada Liliacului, Nr. 11', ‘F’, '01-03-1981');

INSERT INTO persoana VALUES

(2820105634710,'Blagu','Matilda', 'Bucuresti, Strada Rahova, Nr. 53', 'M', '01-05-1982');

INSERT INTO persoana VALUES

(2820204634710,'Mandreci','Cornelia', 'Orsova, Strada Jiului, Nr. 871', ‘F’, '02-04-1982');

INSERT INTO persoana VALUES

(2830305634710,'Popeci','veronica', 'Hunedoara, Strada Teilor, Nr. 21', ‘F’, '03-05-1983');

INSERT INTO persoana VALUES

(2851225634710,'Ghinea','Maria', 'Craiova, Strada Narciselor, Nr. 31', ‘F’, '12-25-1985');

INSERT INTO persoana VALUES

(2860305634710,'Militaru','Marcela', 'Craiova, Strada Brancusi, Nr. 41', ‘F’, '03-05-1986');

INSERT INTO persoana VALUES

(1851203152365, 'Marinescu', 'Georgel', 'Craiova, Strada Carol 1, Nr.44', 'M', '12-03-1985');

INSERT INTO persoana VALUES

(1560212162359, 'Manescu', 'Dorinel', 'Bucuresti, Strada Unirii, Nr.45', 'M', '02-12-1956');

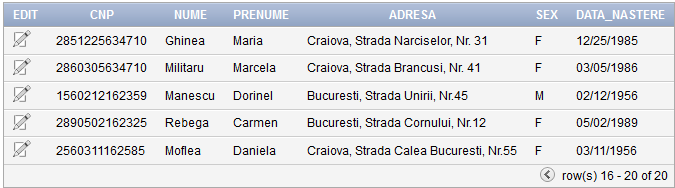
INSERT INTO persoana VALUES

(2890502162325, 'Rebega', 'Carmen', 'Bucuresti, Strada Cornului, Nr.12', 'F', ' 05-02-1989');

INSERT INTO persoana VALUES

(2560311162585, 'Moflea', 'Daniela', 'Craiova, Strada Calea Bucuresti, Nr.55', 'F', '03-11-1956');





**Tabela pacient**

CREATE TABLE pacient

(

cnp NUMBER(13),

data\_internare DATE NOT NULL,

alergii VARCHAR2(50),

loc\_de\_munca VARCHAR(50),

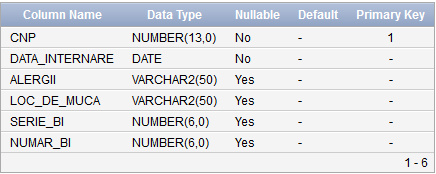
serie\_bi VARCHAR2(2),

numar\_bi NUMBER(6),

PRIMARY KEY(cnp),

CONSTRAINT fk\_cnp1 FOREIGN KEY (cnp) REFERENCES persoana(cnp)

);



INSERT INTO pacient VALUES

(1801112360912,'05-12-2018', 'Nu'¸'Profesor', 'DX', 115858);

INSERT INTO pacient VALUES

(1900610634710,'05-01-2018', 'Nu', 'Distribuitor', 'DX', 212032);

INSERT INTO pacient VALUES

(1810906634710,'05-03-2018','Nu', 'Somer', 'DZ', 253257);

INSERT INTO pacient VALUES

(1851203152365,'05-07-2018', 'Nu', 'Profesor', 'DX', 789523);

INSERT INTO pacient VALUES

(2560311162585,'11-25-2018', 'Paracetamol', 'Inginer', 'DX', 231424);

INSERT INTO pacient VALUES

(2830305634710,'12-05-2018', 'Da'¸'Avocat', 'DZ', 112302);

INSERT INTO pacient VALUES

(2851225634710,'12-07-2018', 'Da', 'Manevrant', 'DZ', 125632);

INSERT INTO pacient VALUES

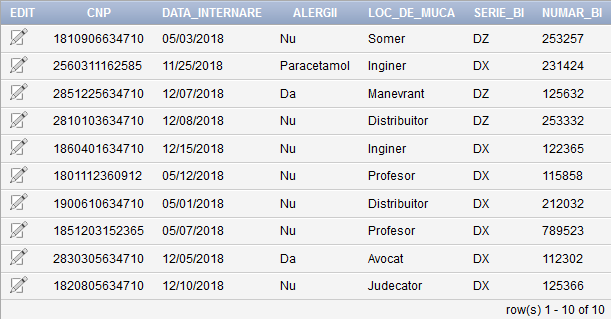
(2810103634710,'12-08-2018', 'Nu', 'Distribuitor', 'DZ', 253332);

INSERT INTO pacient VALUES

(1820805634710,'12-10-2018', 'Nu', 'Judecator', 'DX', 125366);

INSERT INTO pacient VALUES

(1860401634710,'12-15-2018', 'Nu', 'Inginer', 'DX', 122365);



**Tabela Personal Medical**

CREATE TABLE personalmedical

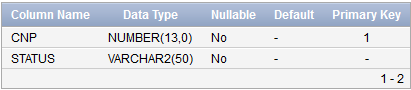
(

cnp NUMBER(13),

status VARCHAR(50) NOT NULL, + id\_sectie foreign key

PRIMARY KEY(cnp), CONSTRAINT fk\_cnp2 FOREIGN KEY(cnp) REFERENCES persoana(cnp)

);



INSERT INTO personalmedical VALUES

(1801112360912, 'Medic');

INSERT INTO personalmedical VALUES

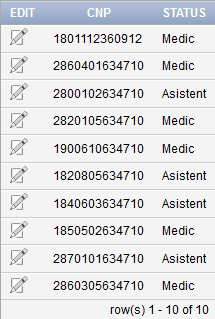
(1900610634710, 'Medic');

INSERT INTO personalmedical VALUES

(1820805634710, 'Asistent');

INSERT INTO personalmedical VALUES

(1840603634710, 'Asistent');

INSERT INTO personalmedical VALUES

(1850502634710, 'Medic');

INSERT INTO personalmedical VALUES

(2860401634710, 'Medic');

INSERT INTO personalmedical VALUES

(2870101634710, 'Asistent');

INSERT INTO personalmedical VALUES

(2800102634710, 'Asistent');

INSERT INTO personalmedical VALUES

(2820105634710, 'Medic');

**Tabela Medic**

CREATE TABLE medic

(

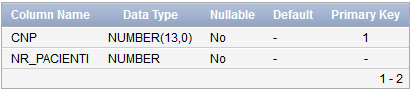
id\_medic NUMBER(1),

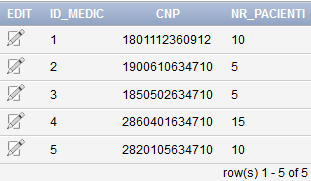
cnp NUMBER(13),

nr\_pacienti NUMBER NOT NULL,

PRIMARY KEY(id\_medic), CONSTRAINT fk\_cnp3 FOREIGN KEY(cnp) REFERENCES personalmedical(cnp)

);



INSERT INTO medic VALUES

(1,1801112360912, 10);

INSERT INTO medic VALUES

(2,1900610634710, 5);

INSERT INTO medic VALUES

(3,1850502634710, 5);

INSERT INTO medic VALUES

(4,2860401634710, 15);

INSERT INTO medic VALUES

(5,2820105634710, 10);

**Tabela Asistent**

CREATE TABLE asistent

(

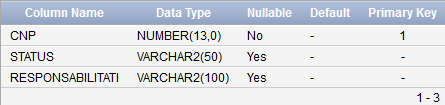
cnp NUMBER(13),

status VARCHAR(50),

responsabilitati VARCHAR(100),

PRIMARY KEY(cnp), CONSTRAINT fk\_cnp4 FOREIGN KEY(cnp) REFERENCES personalmedical(cnp)

);



INSERT INTO asistent VALUES

(1820805634710, 'Asistent', 'Are in grija pacientii de pe sectia "Cardiologie"');

INSERT INTO asistent VALUES

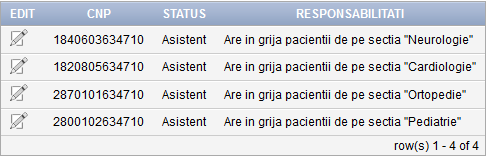
(1840603634710, 'Asistent', 'Are in grija pacientii de pe sectia "Neurologie"');

INSERT INTO asistent VALUES

(2870101634710, 'Asistent', 'Are in grija pacientii de pe sectia "Ortopedie"');

INSERT INTO asistent VALUES

(2800102634710, 'Asistent', 'Are in grija pacientii de pe sectia "Pediatrie"');



**Tabela sectie**

CREATE TABLE sectie

(

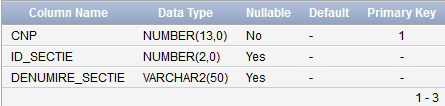
cnp NUMBER(13),

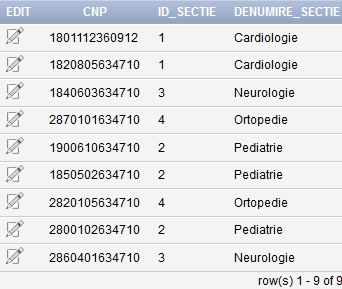
id\_sectie NUMBER(2),

denumire\_sectie VARCHAR(50),

PRIMARY KEY(cnp), CONSTRAINT fk\_cnp5 FOREIGN KEY(cnp) REFERENCES personalmedical(cnp)

);





INSERT INTO sectie VALUES

(1, 1801112360912,’Cardiologie’);

INSERT INTO sectie VALUES

(1, 1820805634710,’Cardiologie’);

INSERT INTO sectie VALUES

(3, 1840603634710,’Neurologie’);

INSERT INTO sectie VALUES

(4, 2870101634710,’Ortopedie’);

INSERT INTO sectie VALUES

(2, 1900610634710,’Pediatrie’);

INSERT INTO sectie VALUES

(2, 1850502634710,’Pediatrie’);

INSERT INTO sectie VALUES

(4, 2820105634710,’Ortopedie’);

INSERT INTO sectie VALUES

(2, 2800102634710,’Pediatrie’);

INSERT INTO sectie VALUES

(3, 2860401634710,’Neurologie’);

**Tabela Diagnostic**

CREATE TABLE diagnostic

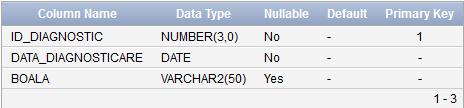
(

id\_diagnostic NUMBER(3) PRIMARY KEY,

data\_diagnosticare DATE NOT NULL,

boala VARCHAR(50)

);



INSERT INTO diagnostic VALUES

(203,'05-12-2018', 'Meningita Acuta');

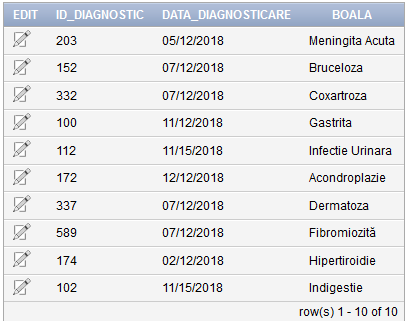
INSERT INTO diagnostic VALUES

(172,'12-12-2018', 'Acondroplazie');

INSERT INTO diagnostic VALUES

(152,'07-12-2018', 'Bruceloza');

INSERT INTO diagnostic VALUES

(332,'07-12-2018', 'Coxartroza');

INSERT INTO diagnostic VALUES

(337,'07-12-2018', 'Dermatoza');

INSERT INTO diagnostic VALUES

(589,'07-12-2018', 'Fibromiozită');

INSERT INTO diagnostic VALUES

(100,'11-12-2018', 'Gastrita');

INSERT INTO diagnostic VALUES

(174,'02-12-2018', 'Hipertiroidie');

INSERT INTO diagnostic VALUES

(102,'11-15-2018', 'Indigestie');

INSERT INTO diagnostic VALUES

(112,'11-15-2018', 'Infectie Urinara');

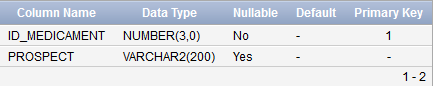
**Tabela Medicament**

CREATE TABLE medicament

(id\_medicament NUMBER(3) PRIMARY KEY,

prospect VARCHAR(200)

);



INSERT INTO medicament VALUES

(001,'2 pastile/zi una dimineata, una seara');

INSERT INTO medicament VALUES

(002,'1 pastila/zi, dupa masa de pranz');

INSERT INTO medicament VALUES

(003,'1 pastila/zi, dupa micul dejun');

INSERT INTO medicament VALUES

(004,'3 pastile/zi dupa fiecare masa principala');

INSERT INTO medicament VALUES

(005,'2 pastile/zi dupa micul dejun si dupa cina');

INSERT INTO medicament VALUES

(006,'1 pastila dimineata pe stomacul gol');

INSERT INTO medicament VALUES

(008,'o jumatate de pastila dimineata inainte de masa');

INSERT INTO medicament VALUES

(009,'o jumatate de pastila dimineata inainte de micul dejun si jumatatea cealalta dupa micul dejun');

INSERT INTO medicament VALUES

(010,'o pastila/2 zile');

INSERT INTO medicament VALUES

(011,'o pastila/1 saptamana');

INSERT INTO medicament VALUES

(012,'1 pastila/zi');

INSERT INTO medicament VALUES

(013,'3pastile/zi');

INSERT INTO medicament VALUES

(014,'2pastile/zi');

INSERT INTO medicament VALUES

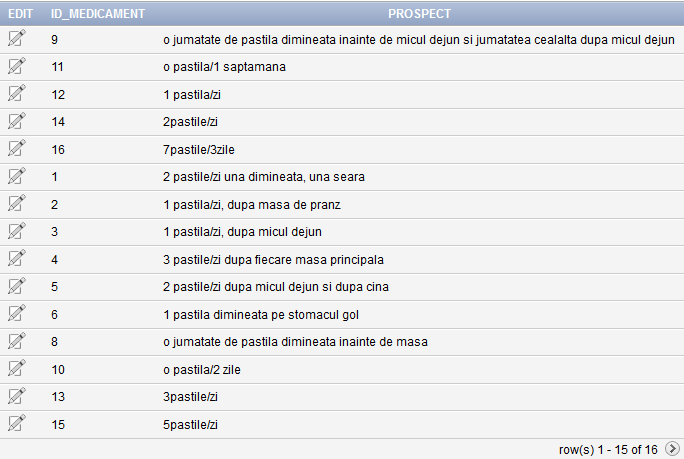
(015,'5pastile/zi');

INSERT INTO medicament VALUES

(016,'7pastile/3zile');

INSERT INTO medicament VALUES

(017,'3pastile/5zile');



**Tabela FISA**

CREATE TABLE fisa

(

id\_fisa

cnp NUMBER(13) PRIMARY KEY,

id\_diagnostic NUMBER(3),

boala VARCHAR(2),

tratament VARCHAR(3),

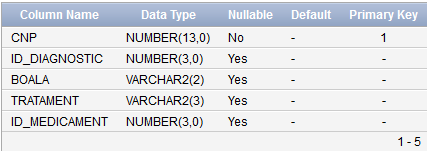
id\_medicament NUMBER(3), + data

CONSTRAINT fk\_cnp7 FOREIGN KEY(cnp) REFERENCES pacient(cnp), + cnp-ul medicului FOREIGN KEY + 2 tabele care fac legatura intre

CONSTRAINT fk\_diagnostic2 FOREIGN KEY(id\_diagnostic) REFERENCES diagnostic(id\_diagnostic),

CONSTRAINT fk\_medicament3 FOREIGN KEY(id\_medicament) REFERENCES medicament(id\_medicament)

);



INSERT INTO fisa VALUES

(1801112360912,332,'CX','TX',002);

INSERT INTO fisa VALUES

(1900610634710,203,'MA','TM',006);

NEW FISA

CREATE TABLE fisa

(

id\_fisa NUMBER(3) PRIMARY KEY,

id\_medic NUMBER(1),

cnp NUMBER(13),

boala VARCHAR(2),

tratament VARCHAR(3),

data\_fisei DATE NOT NULL,

CONSTRAINT fk\_cnp7 FOREIGN KEY(cnp) REFERENCES pacient(cnp),

CONSTRAINT fk\_cnp8 FOREIGN KEY(id\_medic) REFERENCES medic(id\_medic)

);

INSERT INTO fisa VALUES (110, 5, 1801112360912 , 'CX', 'TX' , '12-21-2018');

INSERT INTO medifisa VALUES (110, 002);

INSERT INTO diagfisa VALUES (110, 332);

INSERT INTO fisa VALUES (111, 5,1900610634710, 'MA', 'TM' , '12-21-2018');

INSERT INTO diagfisa VALUES(111, 203);

INSERT INTO medifisa VALUES(111, 006);

INSERT INTO fisa VALUES(112,1, 2560311162585, 'FZ', 'TF', '10-12-2018');

INSERT INTO diagfisa VALUES(112,589);

INSERT INTO medifisa VALUES(112, 017);

INSERT INTO fisa VALUES(113, 2,1851203152365, 'BZ', 'TB', '09-17-2018');

INSERT INTO diagfisa VALUES(113, 152);

INSERT INTO medifisa VALUES(113, 008);

INSERT INTO fisa VALUES(114,3, 2560311162585, 'HT', 'TH', '05-05-2018');

INSERT INTO diagfisa VALUES (114, 174);

INSERT INTO medifisa VALUES (114, 011);

INSERT INTO fisa VALUES(115,4, 2830305634710, 'IG', 'TI', '02-12-2018');

INSERT INTO diagfisa VALUES (115, 102);

INSERT INTO medifisa VALUES (115,009);

INSERT INTO fisa VALUES(116,5, 2851225634710, 'AZ', 'TA', '09-21-2018');

INSERT INTO diagfisa VALUES (116, 172);

INSERT INTO medifisa VALUES (116, 015);

INSERT INTO fisa VALUES(117, 1,2810103634710, 'GS', 'TG', '10-11-2018');

INSERT INTO diagfisa VALUES (117, 100);

INSERT INTO medifisa VALUES (117, 014);

INSERT INTO fisa VALUES(118, 3,1820805634710, 'IU', 'TIU', '11-25-2018');

INSERT INTO diagfisa VALUES (118, 112);

INSERT INTO medifisa VALUES (118, 012);

INSERT INTO fisa VALUES(119,5, 1860401634710, 'DZ', 'TD', '12-15-2018');

INSERT INTO diagfisa VALUES (119,152);

INSERT INTO medifisa VALUES (119, 011);

Tabel multi la multi pentru MEDICAMENT si FISA

CREATE TABLE medifisa

(

id\_medicament NUMBER(3),

id\_fisa NUMBER(3),

primary key(id\_fisa, id\_medicament)

);

INSERT INTO medifisa VALUES (

Tabel multi la multi pentru Diagnostic si Fisa

CREATE TABLE diagfisa

(

id\_diagnostic NUMBER(3),

id\_fisa NUMBER(3),

primary key(id\_fisa, id\_diagnostic)

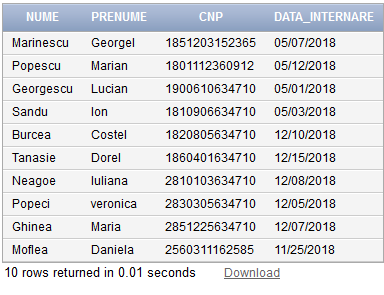
);

1. **Interogari**
2. Sa se ordoneze numele si prenumele persoanelor din tabela “Persoana”, in ordine alfabetica dupa nume.

SELECT nume, prenume, cnp

FROM persoana

ORDER BY nume

1. Sa se selecteze dintre personae, doar pacientii, afisand numele si cnp-ul, precum si data internarii.

SELECT persoana.nume, persoana.prenume

, pacient.cnp, pacient.data\_internare

FROM persoana

INNER JOIN pacient

ON persoana.cnp = pacient.cnp;

1. Sa se afiseze tote datele persoanei cu cnp = 1851203152365

SELECT \*

FROM persoana

WHERE cnp = 1851203152365



1. Sa se afiseze numarul de pacienti cu care lucreaza medicul cu CNP-ul = 1900610634710

SELECT medic.cnp, medic.nr\_pacienti

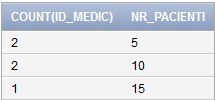
FROM medic

INNER JOIN persoana on persoana.cnp = medic.cnp

WHERE medic.cnp = 1900610634710



1. Group by statement.



SELECT COUNT(id\_medic), Nr\_pacienti

FROM medic

GROUP BY Nr\_pacienti

1. Sa se afiseze personlul medical si statutul personalului de la sectia Cardiologie.

SELECT persoana.nume, persoana.prenume,personalmedical.statut,sectie.denumire\_sectie

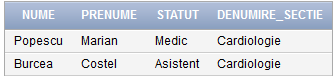
FROM persoana

INNER JOIN personalmedical ON persoana.cnp = personalmedical.cnp

INNER JOIN sectie

ON persoana.cnp = sectie.cnp

WHERE id\_sectie = 1

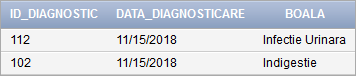


1. Sa se afiseze bolile care incep cu litera I.

SELECT \*

FROM diagnostic

WHERE diagnostic.boala LIKE 'I%';



1. Sa se afiseze datele despre toate persoanele care s-a nascut dupa anul 1980.

SELECT \*

FROM persoana

WHERE data\_nastere > '12/31/1980 ';



1. Sa se afiseze toate datele din fisa pacientului cu CNP-ul 1801112360912.

SELECT \*

FROM fisa

WHERE fisa.cnp = 1801112360912



1. Sa se afiseze codul medicamentul pacientului cu CNP-ul 1900610634710

SELECT persoana.nume, persoana.prenume,pacient.cnp, medicament.id\_medicament, medicament.prospect

FROM pacient

INNER JOIN persoana

ON persoana.cnp = pacient.cnp

INNER JOIN fisa

ON pacient.cnp = fisa.cnp

INNER JOIN medifisa

ON fisa.id\_fisa = medifisa.id\_fisa

INNER JOIN medicament

ON medicament.id\_medicament = medifisa.id\_medicament

WHERE pacient.cnp = 1900610634710

1. Sa se afiseze toate persoanele de sex masculine.

SELECT \*

FROM persoana

WHERE persoana.sex = 'M';



1. Sa se afiseze sectia si id-ul sectiei pe care lucreaza asistentul cu CNP-ul 1840603634710.

SELECT sectie.denumire\_sectie, sectie.id\_sectie

FROM sectie

INNER JOIN asistent

ON asistent.cnp = sectie.cnp

WHERE asistent.cnp = 1840603634710



1. Sa se afiseze boala care coincide diagnosticului cu id-ul 203

SELECT diagnostic.id\_diagnostic,diagnostic.boala

FROM diagnostic

WHERE diagnostic.id\_diagnostic = 203



1. Sa se afiseze responsabilitatea asistentului cu cnp-ul 2870101634710

SELECT asistent.cnp, asistent.responsabilitati

FROM asistent

WHERE asistent.cnp = 2870101634710

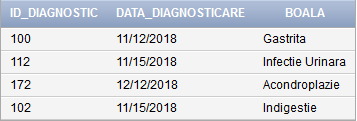


1. Sa se afiseze toti pacientii care au fost diagnosticati dupa data 12/07/2018

SELECT \*

FROM diagnostic

WHERE diagnostic.data\_diagnosticare > '07/12/2018'



+left/right outer join

+subinterogare \*medicamentele care nu au fost utilizate pe fisa

1. **PROCEDURI**
2. Sa se creeze o procedura care primeste ca input CNP-ul si adresa. Procedura va actualiza adresa persoanei respective.

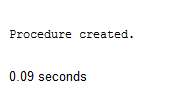
CREATE OR REPLACE PROCEDURE update\_adress(cnp\_x IN persoana.cnp%TYPE, adresa\_x IN persoana.adresa%TYPE)

IS

BEGIN

UPDATE persoana SET adresa = adresa\_x WHERE cnp = cnp\_x;

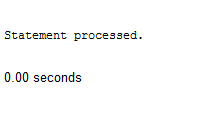
END update\_adress;



BEGIN

update\_adress(2890502162325, 'Craiova, strada Calea Bucuresti');

END



SELECT \* FROM persoana WHERE cnp = 2890502162325



1. Sa se creeze o procedura care primeste ca input CNP-ul si numarul de pacienti al medicului. Procedura va actualiza numarul de pacienti al medicului respectiv.

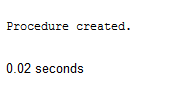
CREATE OR REPLACE PROCEDURE update\_medic(cnp\_x IN medic.cnp%TYPE, nr\_pacienti\_x IN medic.nr\_pacienti%TYPE)

IS

BEGIN

UPDATE medic SET nr\_pacienti = nr\_pacienti\_x WHERE cnp = cnp\_x;

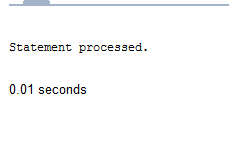
END update\_medic;



BEGIN

update\_medic(1850502634710, 50);

END



SELECT \* FROM medic WHERE cnp = 1850502634710



1. **FUNCTII**
2. Sa se returneze numarul de medici din personalul medical.

CREATE OR REPLACE FUNCTION count\_medics(ms\_id in personalmedical.statut%TYPE)

RETURN number

IS

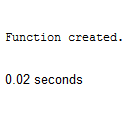
nr\_inv number(10);

BEGIN

SELECT count(statut) INTO nr\_inv FROM personalmedical WHERE statut = ms\_id;

RETURN nr\_inv;

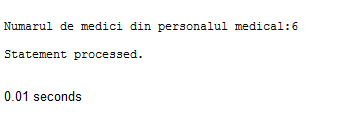
END count\_medics;



BEGIN

DBMS\_OUTPUT.PUT\_LINE('Numarul de medici din personalul medical:'||count\_medics('Medic'));

END



1. Sa se afiseze numarul de boli care incep cu litera ‘I’.

CREATE OR REPLACE FUNCTION idf\_boli(boala\_id in diagnostic.boala%TYPE)

RETURN number

IS

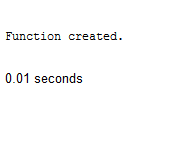
nr\_boli number(10);

BEGIN

SELECT count(boala) INTO nr\_boli FROM diagnostic WHERE diagnostic.boala LIKE 'I%';

RETURN nr\_boli;

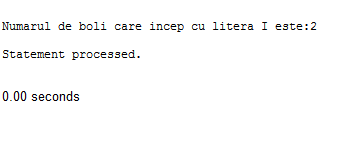
END idf\_boli;



BEGIN

DBMS\_OUTPUT.PUT\_LINE('Numarul de boli care incep cu litera I este:'||idf\_boli(''));

END



1. **TRIGGER**

Sa se creeze un trigger pentru adaugarea unui nou pacient in numarul de pacienti al medicului.

CREATE OR REPLACE TRIGGER update\_pacienti

BEFORE UPDATE on medic

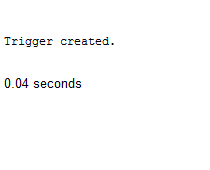
FOR EACH ROW

BEGIN

UPDATE medic SET nr\_pacienti=:new.nr\_pacienti WHERE cnp =:cnp;

DBMS\_OUTPUT.PUT\_LINE('S-a modificat numarul de pacienti');

END



UPDATE medic SET nr\_pacienti = 7 WHERE cnp = 2810103634710