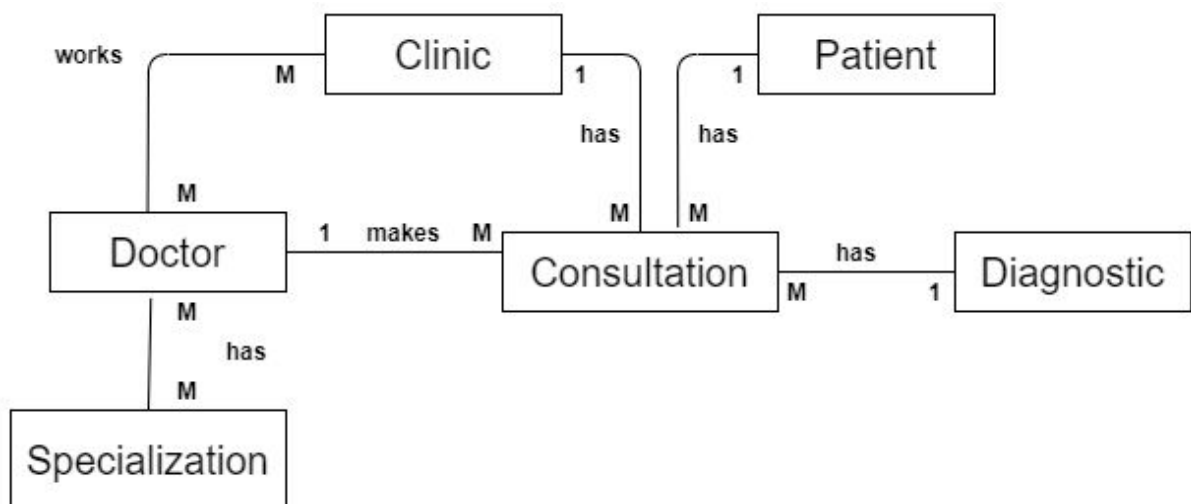


Proiect Sgbd

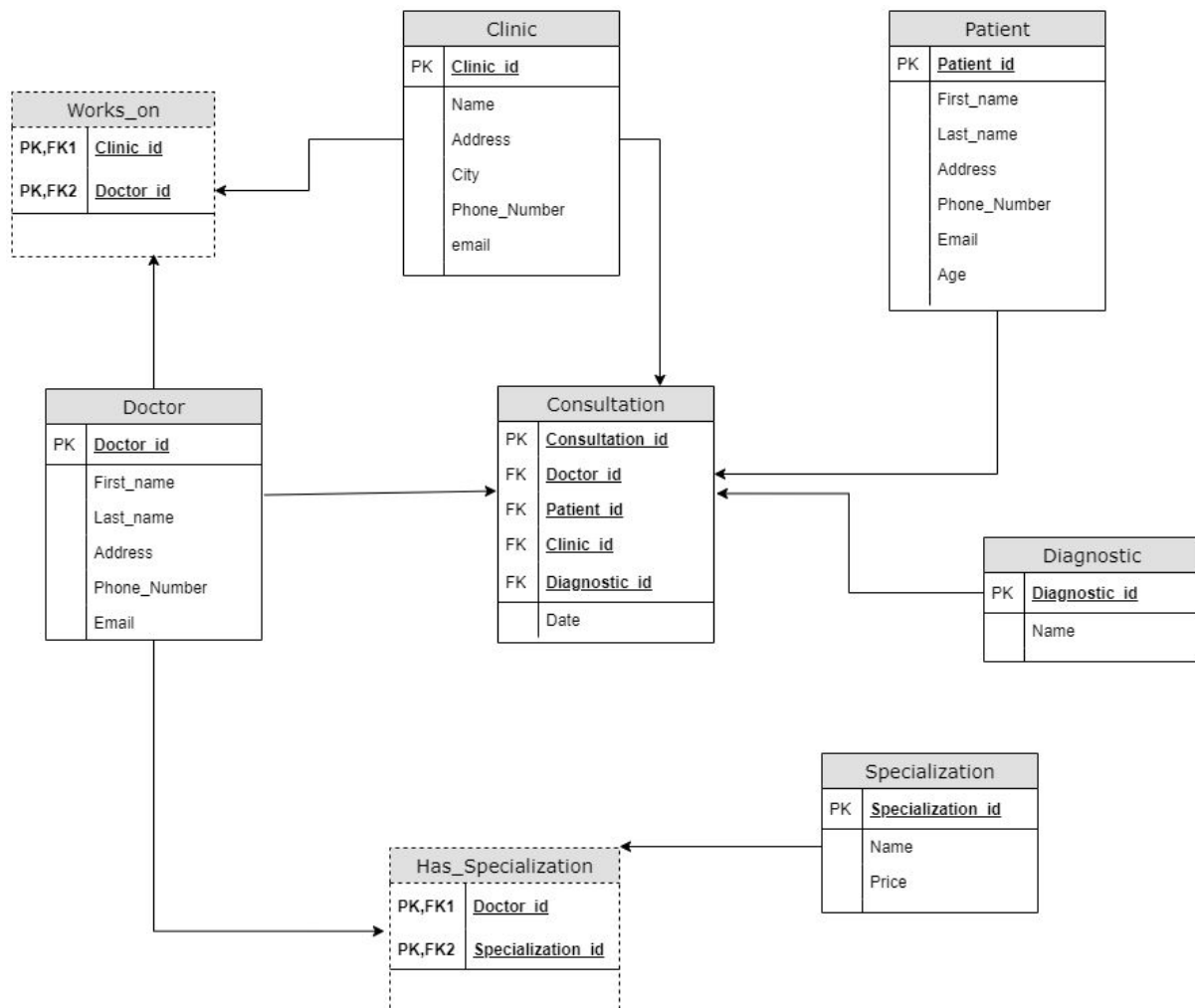
Exercițiul 1

Rolul acestei baze de date este de a tine evidenta datelor unor clinici precum doctorii care lucrează acolo și ce specializări au, consultatiile pe care le fac, pacienții și diagnosticul lor.

Exercițiul 2



Exercițiul 3



Exercițiul 4

```

CREATE TABLE clinic (
    clinic_id INT PRIMARY KEY,
    name VARCHAR(30) NOT NULL,
    address VARCHAR(60) NOT NULL,
    city VARCHAR(15) NOT NULL,
    phone_number VARCHAR(15) NOT NULL,
    email VARCHAR(25)
);
  
```

```

CREATE TABLE doctor (
    doctor_id INT PRIMARY KEY,
    first_name VARCHAR(15) NOT NULL,
    last_name VARCHAR(15) NOT NULL,
    address VARCHAR(60),
    phone_number VARCHAR(15) NOT NULL,
    email VARCHAR(40)
);
  
```

```

CREATE TABLE works_on (
  
```

```

clinic_id INT,
doctor_id INT,
CONSTRAINT clinic_doctor_pk PRIMARY KEY ( clinic_id, doctor_id ),
FOREIGN KEY ( clinic_id ) REFERENCES clinic ( clinic_id ),
FOREIGN KEY ( doctor_id ) REFERENCES doctor ( doctor_id )
);

CREATE TABLE specialization (
specialization_id INT PRIMARY KEY,
name VARCHAR(40) NOT NULL UNIQUE,
price NUMBER(5)
);

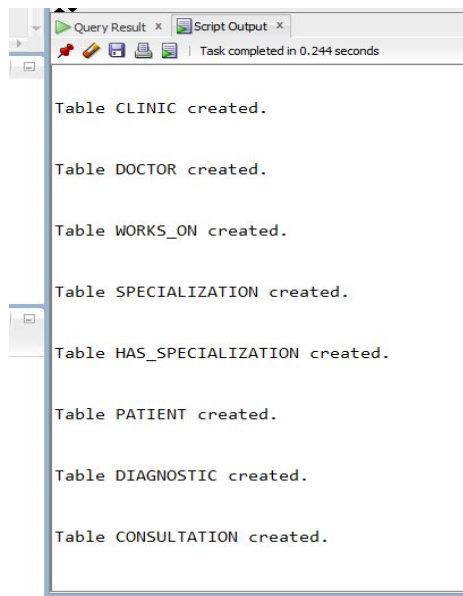
CREATE TABLE has_specialization (
doctor_id INT,
specialization_id INT,
CONSTRAINT doctor_specialization_pk PRIMARY KEY ( doctor_id, specialization_id ),
FOREIGN KEY ( specialization_id ) REFERENCES specialization ( specialization_id ),
FOREIGN KEY ( doctor_id ) REFERENCES doctor ( doctor_id )
);

CREATE TABLE patient (
patient_id NUMBER(4) PRIMARY KEY,
first_name VARCHAR(15) NOT NULL,
last_name VARCHAR(15) NOT NULL,
address VARCHAR(60),
phone_number VARCHAR(15) NOT NULL,
email VARCHAR(25),
age NUMBER(3) CHECK ( age > 0 )
);

CREATE TABLE diagnostic (
diagnostic_id INT PRIMARY KEY,
name VARCHAR(20) NOT NULL UNIQUE
);

CREATE TABLE consultation (
consultation_id NUMBER(4) PRIMARY KEY,
doctor_id NUMBER(4),
patient_id NUMBER(4),
clinic_id NUMBER(4),
diagnostic_id NUMBER(4),
consultation_date DATE NOT NULL,
FOREIGN KEY ( doctor_id ) REFERENCES doctor ( doctor_id ),
FOREIGN KEY ( patient_id ) REFERENCES patient ( patient_id ),
FOREIGN KEY ( clinic_id ) REFERENCES clinic ( clinic_id ),
FOREIGN KEY ( diagnostic_id ) REFERENCES diagnostic ( diagnostic_id )
);

```



Exercițiul 5

```
CREATE SEQUENCE sec_specialization
start with 1
increment by 1
minvalue 1
maxvalue 9999
cycle;
```

```
CREATE SEQUENCE sec_doctor
start with 1
increment by 1
minvalue 1
maxvalue 9999
cycle;
```

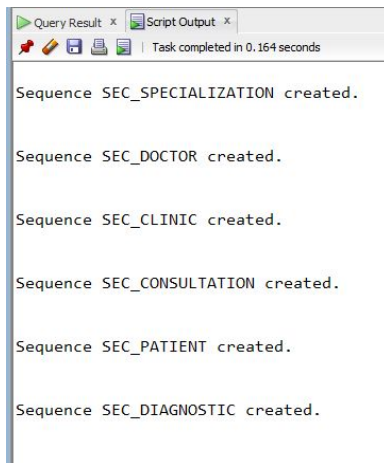
```
CREATE SEQUENCE sec_clinic
start with 1
increment by 1
minvalue 1
maxvalue 9999
cycle;
```

```
CREATE SEQUENCE sec_consultation
start with 1
increment by 1
minvalue 1
maxvalue 9999
cycle;
```

```
CREATE SEQUENCE sec_patient
start with 1
increment by 1
minvalue 1
maxvalue 9999
```

cycle;

```
CREATE SEQUENCE sec_diagnostic
start with 1
increment by 1
minvalue 1
maxvalue 9999
cycle;
```



--into clinic

```
INSERT INTO clinic (clinic_id, name, address, city, phone_number , email)
VALUES (sec_clinic.nextval, 'Mayo Clinic', 'Str Lalelelor 24', 'Cluj', '0567143567', 'mayoclinic@gmail.com');
```

```
INSERT INTO clinic (clinic_id, name, address, city, phone_number , email)
VALUES (sec_clinic.nextval, 'One Medical', 'Stefan cel Mare 12', 'Cluj', '0235472548',
'onemedical@gmail.com');
```

```
INSERT INTO clinic (clinic_id, name, address, city, phone_number , email)
VALUES (sec_clinic.nextval, 'Medlife', 'Str Mihai Viteazul 2', 'Bucuresti', '0943769293', 'medlife@gmail.com');
```

```
INSERT INTO clinic (clinic_id, name, address, city, phone_number , email)
VALUES (sec_clinic.nextval, 'Family Medical', 'Str Aviatorilor nr 14 ', 'Bucuresti', '05739485932',
'familymedical@gmail.com');
```

```
INSERT INTO clinic (clinic_id, name, address, city, phone_number , email)
VALUES (sec_clinic.nextval, 'Uni Clinic', 'Str Castanilor 51', 'Bucuresti', '0237433371', 'uniclinic@gmail.com');
```

```
INSERT INTO clinic (clinic_id, name, address, city, phone_number , email)
VALUES (sec_clinic.nextval, 'Uni Clinic', 'Str Eroilor 4', 'Sibiu', '0437642847', 'uniclinic_sibiu@gmail.com');
```

```
INSERT INTO clinic (clinic_id, name, address, city, phone_number , email)
VALUES (sec_clinic.nextval, 'Clinica', 'Str Florilor 8', 'Sibiu', '0478684777', 'clinica@gmail.com');
```

CLINIC_ID	NAME	ADDRESS	CITY	PHONE_NUMBER	EMAIL
1	1 Mayo Clinic	Str Lalelelor 24	Cluj	0567143567	mayoclinic@gmail.com
2	2 One Medical	Stefan cel Mare 12	Cluj	0235472548	onemedical@gmail.com
3	3 Medlife	Str Mihai Viteazul 2	Bucuresti	0943769293	medlife@gmail.com
4	4 Family Medical	Str Aviatorilor nr 14	Bucuresti	05739485932	familymedical@gmail.com
5	5 Uni Clinic	Str Castanilor 51	Bucuresti	0237433371	uniclinic@gmail.com
6	6 Uni Clinic	Str Eroilor 4	Sibiu	0437642847	uniclinic_sibiu@gmail.com
7	7 Clinica	Str Florilor 8	Sibiu	0478684777	clinica@gmail.com

--into doctor

```
INSERT INTO doctor (doctor_id, first_name, last_name, address, phone_number , email)
VALUES (sec_doctor.nextval, 'Elena', 'Popescu', 'Calea Moine?ti nr 12', '0723764839',
'elena.popescu@gmail.com');
```

```
INSERT INTO doctor (doctor_id, first_name, last_name, address, phone_number , email)
VALUES (sec_doctor.nextval, 'Maria', 'Barsan', 'Calea Romanului nr 8', '0734512396',
'maria.barsan@gmail.com' );
```

```
INSERT INTO doctor (doctor_id, first_name, last_name, address, phone_number , email)
VALUES (sec_doctor.nextval, 'Ana', 'Trefas', 'Strada 13 Septembrie nr 5', '0537445890',
'ana.trefas@gmail.com');
```

```
INSERT INTO doctor (doctor_id, first_name, last_name, address, phone_number , email)
VALUES (sec_doctor.nextval, 'Razvan', 'Pavel', 'Strada 7 Noiembrie nr 2', '0546789675',
'razvan.pavel@gmail.com');
```

```
INSERT INTO doctor (doctor_id, first_name, last_name, address, phone_number , email)
VALUES (sec_doctor.nextval, 'Marian', 'Ionescu', 'Strada Alecu Russo nr 4', '0823458298',
'marian.ionescu@gmail.com');
```

```
INSERT INTO doctor (doctor_id, first_name, last_name, address, phone_number , email)
VALUES (sec_doctor.nextval, 'Monica', 'Balaita', 'Strada Aprodu Purice nr 34', '0645783456',
'monica.balaita@gmail.com');
```

```
INSERT INTO doctor (doctor_id, first_name, last_name, address, phone_number , email)
VALUES (sec_doctor.nextval, 'Mariana', 'Marinov', 'Strada Barajului 34', '0983574757', null);
```

```
INSERT INTO doctor (doctor_id, first_name, last_name, address, phone_number , email)
VALUES (sec_doctor.nextval, 'Daniel', 'Andrei', 'Strada Brându?ei 5', '0957473222',
'daniel.andrei@gmail.com');
```

```
INSERT INTO doctor (doctor_id, first_name, last_name, address, phone_number , email)
VALUES (sec_doctor.nextval, 'Andrei', 'Popa', null, '0937451823', 'andrei.popa@gmail.com');
```

```
INSERT INTO doctor (doctor_id, first_name, last_name, address, phone_number , email)
VALUES (sec_doctor.nextval, 'Adrian', 'Gavriliu', 'Strada Caraiman 7', '0334562847',
'adrian.gavriliu@gmail.com');
```

```
INSERT INTO doctor (doctor_id, first_name, last_name, address, phone_number , email)
VALUES (sec_doctor.nextval, 'Maria', 'Balaban', 'Strada Corbului 3', '0645372981',
'maria.balaban@gmail.com');
```

```
INSERT INTO doctor (doctor_id, first_name, last_name, address, phone_number , email)
VALUES (sec_doctor.nextval, 'Alexandra', 'Botezatu', null, '0432567834', 'alexandra.botezatu@gmail.com');
```

```
INSERT INTO doctor (doctor_id, first_name, last_name, address, phone_number , email)
```

VALUES (sec_doctor.nextval, 'Bianca', 'Popa', 'Strada Dobrogei 5', '0323452333', null);

INSERT INTO doctor (doctor_id, first_name, last_name, address, phone_number , email)
VALUES (sec_doctor.nextval, 'Andreea', 'Benchea', 'Strada Fagului 67', '0875628673',
'andreea.benchea@gmail.com');

INSERT INTO doctor (doctor_id, first_name, last_name, address, phone_number , email)
VALUES (sec_doctor.nextval, 'Mariana', 'Cadaru', null, '0936457845', 'mariana.cadaru@gmail.com');

INSERT INTO doctor (doctor_id, first_name, last_name, address, phone_number , email)
VALUES (sec_doctor.nextval, 'Mirela', 'Popescu', null, '0434368553', 'mirela.popescu@gmail.com');

INSERT INTO doctor (doctor_id, first_name, last_name, address, phone_number , email)
VALUES (sec_doctor.nextval, 'Tudor', 'Silion', null, '0537898777', 'tudor.silion@gmail.com');

INSERT INTO doctor (doctor_id, first_name, last_name, address, phone_number , email)
VALUES (sec_doctor.nextval, 'Ioana', 'Arama', 'Strada Gloriei 54', '0433235655', null);

INSERT INTO doctor (doctor_id, first_name, last_name, address, phone_number , email)
VALUES (sec_doctor.nextval, 'Ioana', 'Zidaru', 'Strada Iasomieii 34', '0789435356', 'ioana.zidaru@gmail.com');

INSERT INTO doctor (doctor_id, first_name, last_name, address, phone_number , email)
VALUES (sec_doctor.nextval, 'Giulia', 'Caragea', 'Strada Livezilor 21', '0454578654', null);

DOCTOR_ID	FIRST_NAME	LAST_NAME	ADDRESS	PHONE_NUMBER	EMAIL
1	Elena	Popescu	Calea Moine?ti nr 12	0723764839	elena.popescu@gmail.com
2	Maria	Barsan	Calea Romanului nr 8	0734512396	maria.barsan@gmail.com
3	Ana	Trefas	Strada 13 Septembrie nr 5	0537445890	ana.trefas@gmail.com
4	Razvan	Pavel	Strada 7 Noiembrie nr 2	0546789675	razvan.pavel@gmail.com
5	Marian	Ionescu	Strada Alecu Russo nr 4	0823458298	marian.ionescu@gmail.com
6	Monica	Balaita	Strada Aprodu Purice nr 34	0645783456	monica.balaita@gmail.com
7	Mariana	Marinov	Strada Barajului 34	0983574757	(null)
8	Daniel	Andrei	Strada Brându?ei 5	0957473222	daniel.andrei@gmail.com
9	Andrei	Popa	(null)	0937451823	andrei.popa@gmail.com
10	Adrian	Gavriliu	Strada Caraiman 7	0334562847	adrian.gavriliu@gmail.com
11	Maria	Balaban	Strada Corbului 3	0645372981	maria.balaban@gmail.com
12	Alexandra	Botezatu	(null)	0432567834	alexandra.botezatu@gmail.com
13	Bianca	Popa	Strada Dobrogei 5	0323452333	(null)
14	Andreea	Benchea	Strada Fagului 67	0875628673	andreea.benchea@gmail.com
15	Mariana	Cadaru	(null)	0936457845	mariana.cadaru@gmail.com
16	Mirela	Popescu	(null)	0434368553	mirela.popescu@gmail.com
17	Tudor	Silion	(null)	0537898777	tudor.silion@gmail.com
18	Ioana	Arama	Strada Gloriei 54	0433235655	(null)
19	Ioana	Zidaru	Strada Iasomieii 34	0789435356	ioana.zidaru@gmail.com
20	Giulia	Caragea	Strada Livezilor 21	0454578654	(null)

--into works_on

INSERT INTO works_on (clinic_id, doctor_id)
VALUES (1,1);

INSERT INTO works_on (clinic_id, doctor_id)
VALUES (1,2);

INSERT INTO works_on (clinic_id, doctor_id)
VALUES (1,3);

INSERT INTO works_on (clinic_id, doctor_id)
VALUES (1,4);

INSERT INTO works_on (clinic_id, doctor_id)
VALUES (1,5);

```
INSERT INTO works_on (clinic_id, doctor_id)
VALUES (1,6);
```

```
INSERT INTO works_on (clinic_id, doctor_id)
VALUES (2,4);
```

```
INSERT INTO works_on (clinic_id, doctor_id)
VALUES (2,7);
```

```
INSERT INTO works_on (clinic_id, doctor_id)
VALUES (2,8);
```

```
INSERT INTO works_on (clinic_id, doctor_id)
VALUES (2,9);
```

```
INSERT INTO works_on (clinic_id, doctor_id)
VALUES (2,5);
```

```
INSERT INTO works_on (clinic_id, doctor_id)
VALUES (2,6);
```

```
INSERT INTO works_on (clinic_id, doctor_id)
VALUES (3,10);
```

```
INSERT INTO works_on (clinic_id, doctor_id)
VALUES (3,11);
```

```
INSERT INTO works_on (clinic_id, doctor_id)
VALUES (3,12);
```

```
INSERT INTO works_on (clinic_id, doctor_id)
VALUES (3,13);
```

```
INSERT INTO works_on (clinic_id, doctor_id)
VALUES (3,14);
```

```
INSERT INTO works_on (clinic_id, doctor_id)
VALUES (3,15);
```

```
INSERT INTO works_on (clinic_id, doctor_id)
VALUES (4,11);
```

```
INSERT INTO works_on (clinic_id, doctor_id)
VALUES (4,14);
```

```
INSERT INTO works_on (clinic_id, doctor_id)
VALUES (4,15);
```

```
INSERT INTO works_on (clinic_id, doctor_id)
VALUES (4,16);
```

```
INSERT INTO works_on (clinic_id, doctor_id)
VALUES (4,17);
```

```
INSERT INTO works_on (clinic_id, doctor_id)
VALUES (5,18);
```



```
INSERT INTO works_on (clinic_id, doctor_id)
VALUES (5,19);
```

```
INSERT INTO works_on (clinic_id, doctor_id)
VALUES (5,20);
```

```
INSERT INTO works_on (clinic_id, doctor_id)
VALUES (5,10);
```

```
INSERT INTO works_on (clinic_id, doctor_id)
VALUES (5,13);
```

	CLINIC_ID	DOCTOR_ID
1	1	1
2	1	2
3	1	3
4	1	4
5	1	5
6	1	6
7	2	4
8	2	7
9	2	8
10	2	9

--into specialization

```
INSERT INTO specialization (specialization_id, name, price )
VALUES (sec_specialization.nextval, 'Alergologie', 180);
```

```
INSERT INTO specialization (specialization_id, name, price )
VALUES (sec_specialization.nextval, 'Dermatologie', 200);
```

```
INSERT INTO specialization (specialization_id, name, price )
VALUES (sec_specialization.nextval, 'Cardiologie', 200);
```

```
INSERT INTO specialization (specialization_id, name, price )
VALUES (sec_specialization.nextval, 'Medicina Interna', 320);
```

```
INSERT INTO specialization (specialization_id, name, price )
VALUES (sec_specialization.nextval, 'Stomatologie', 300);
```

```
INSERT INTO specialization (specialization_id, name, price )
VALUES (sec_specialization.nextval, 'Oftalmologie', 190);
```

```
INSERT INTO specialization (specialization_id, name, price )
VALUES (sec_specialization.nextval, 'Pediatrie', 240);
```

```
INSERT INTO specialization (specialization_id, name, price )
VALUES (sec_specialization.nextval, 'O.R.L.', 270);
```

```
INSERT INTO specialization (specialization_id, name, price )
VALUES (sec_specialization.nextval, 'Psihiatrie', 350);
```

```
INSERT INTO specialization (specialization_id, name, price )
VALUES (sec_specialization.nextval, 'Endocrinologie', 250);
```

```
INSERT INTO specialization (specialization_id, name, price )
VALUES (sec_specialization.nextval, 'Imunologie', 250);
```

```
INSERT INTO specialization (specialization_id, name, price )
VALUES (sec_specialization.nextval, 'Neurologie', 150);
```

	SPECIALIZATION_ID	NAME	PRICE
1	1	Alergologie	180
2	2	Dermatologie	200
3	3	Cardiologie	200
4	4	Medicina Interna	320
5	5	Stomatologie	300
6	6	Oftalmologie	190
7	7	Pediatric	240
8	8	O.R.L.	270
9	9	Psichiatrie	350
10	10	Endocrinologie	250
11	11	Imunologie	250
12	12	Neurologie	150

--into has_specialization

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (1, 3);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (1, 4);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (2, 2);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (3, 1);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (4, 6);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (4, 8);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (5, 10);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (6, 11);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (7, 3);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (8, 2);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (9, 4);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (10, 3);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (10, 4);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (11, 10);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (12, 2);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (13, 6);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (14, 8);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (15, 11);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (15, 1);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (16, 3);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (16, 4);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (17, 5);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (18, 7);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (19, 9);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (19, 12);
```

```
INSERT INTO has_specialization (doctor_id, specialization_id)
VALUES (20, 10);
```

DOCTOR_ID	SPECIALIZATION_ID
1	3
2	4
3	2
4	1
5	6
6	8
7	10
8	11
9	3
10	2
11	4
12	6
13	8
14	10
15	11
16	3
17	5
18	7
19	9
20	10

--into patient

```
INSERT INTO patient (patient_id, first_name, last_name, address, phone_number , email, age)
VALUES (sec_patient.nextval, 'Monica', 'Popescu', 'Strada la?ilor 98', '0676742345', null, 34);
```

```
INSERT INTO patient (patient_id, first_name, last_name, address, phone_number , email, age)
```

```
VALUES (sec_patient.nextval, 'Andreea', 'Ionescu', 'Strada Izvoare 7', '0875463758',
'andreea.ionescu@gmail.com', 65);
```

```
INSERT INTO patient (patient_id, first_name, last_name, address, phone_number , email, age)
VALUES (sec_patient.nextval, 'Irina', 'Popa', 'Strada Lunei 5', '0836574658', null, 78);
```

```
INSERT INTO patient (patient_id, first_name, last_name, address, phone_number , email, age)
VALUES (sec_patient.nextval, 'Paul', 'Solomon', null, '0847572348', 'paul.solomon@gmail.com' , 14);
```

```
INSERT INTO patient (patient_id, first_name, last_name, address, phone_number , email, age)
VALUES (sec_patient.nextval, 'Emanuel', 'Adam', 'Strada Milcov 32', '0965743788',
'emanuel.adam@gmail.com', 23);
```

```
INSERT INTO patient (patient_id, first_name, last_name, address, phone_number , email, age)
VALUES (sec_patient.nextval, 'Ioan', 'Dinca', 'Strada Morii 53', '0846468576', null, 45);
```

```
INSERT INTO patient (patient_id, first_name, last_name, address, phone_number , email, age)
VALUES (sec_patient.nextval, 'Daniel', 'Budau', 'Strada Orizontului 6', '0893543456',
'daniel.budau@gmail.com', 32);
```

```
INSERT INTO patient (patient_id, first_name, last_name, address, phone_number , email, age)
VALUES (sec_patient.nextval, 'Alin', 'Damian', null, '0645486989', 'alin.damian@gmail.com', 29);
```

```
INSERT INTO patient (patient_id, first_name, last_name, address, phone_number , email, age)
VALUES (sec_patient.nextval, 'Alexandru', 'Apostol', 'Strada Prieteniei 95', '0237845671',
'alex.apostol@gmail.com', 54);
```

PATIENT_ID	FIRST_NAME	LAST_NAME	ADDRESS	PHONE_NUMBER	EMAIL	AGE
1	Monica	Popescu	Strada Ia?ilor 98	0676742345	(null)	34
2	Andreea	Ionescu	Strada Izvoare 7	0875463758	andreea.ionescu@gmail.com	65
3	Irina	Popa	Strada Lunei 5	0836574658	(null)	78
4	Paul	Solomon	(null)	0847572348	paul.solomon@gmail.com	14
5	Emanuel	Adam	Strada Milcov 32	0965743788	emanuel.adam@gmail.com	23
6	Ioan	Dinca	Strada Morii 53	0846468576	(null)	45
7	Daniel	Budau	Strada Orizontului 6	0893543456	daniel.budau@gmail.com	32
8	Alin	Damian	(null)	0645486989	alin.damian@gmail.com	29
9	Alexandru	Apostol	Strada Prieteniei 95	0237845671	alex.apostol@gmail.com	54

--into diagnostic

```
INSERT INTO diagnostic (diagnostic_id, name)
VALUES (sec_diagnostic.nextval, 'Astm alergic');
```

```
INSERT INTO diagnostic (diagnostic_id, name)
VALUES (sec_diagnostic.nextval, 'Rinita alergica');
```

```
INSERT INTO diagnostic (diagnostic_id, name)
VALUES (sec_diagnostic.nextval, 'Acnee');
```

```
INSERT INTO diagnostic (diagnostic_id, name)
VALUES (sec_diagnostic.nextval, 'Rozacee');
```

```
INSERT INTO diagnostic (diagnostic_id, name)
VALUES (sec_diagnostic.nextval, 'Hipertensiune');
```

```

INSERT INTO diagnostic (diagnostic_id, name)
VALUES (sec_diagnostic.nextval, 'Hepatita');

INSERT INTO diagnostic (diagnostic_id, name)
VALUES (sec_diagnostic.nextval, 'Gastrita');

INSERT INTO diagnostic (diagnostic_id, name)
VALUES (sec_diagnostic.nextval, 'Afectiune digestiva');

INSERT INTO diagnostic (diagnostic_id, name)
VALUES (sec_diagnostic.nextval, 'Gingivita');

INSERT INTO diagnostic (diagnostic_id, name)
VALUES (sec_diagnostic.nextval, 'Alzheimer');

INSERT INTO diagnostic (diagnostic_id, name)
VALUES (sec_diagnostic.nextval, 'Amnezie');

INSERT INTO diagnostic (diagnostic_id, name)
VALUES (sec_diagnostic.nextval, 'Cataracta');

INSERT INTO diagnostic (diagnostic_id, name)
VALUES (sec_diagnostic.nextval, 'Depresie');

INSERT INTO diagnostic (diagnostic_id, name)
VALUES (sec_diagnostic.nextval, 'Schizofrenie');

INSERT INTO diagnostic (diagnostic_id, name)
VALUES (sec_diagnostic.nextval, 'Hipotiroidism');

```

DIAGNOSTIC_ID	NAME
1	1 Astm alergic
2	2 Rinita alergica
3	3 Acnee
4	4 Rozacee
5	5 Hipertensiune
6	6 Hepatita
7	7 Gastrita
8	8 Afectiune digestiva
9	9 Gingivita
10	10 Alzheimer
11	11 Amnezie
12	12 Cataracta
13	13 Depresie
14	14 Schizofrenie
15	15 Hipotiroidism

--into consultation

```

INSERT INTO consultation (consultation_id, doctor_id, patient_id, clinic_id, diagnostic_id, consultation_date)
VALUES (SEC_CONSULTATION.nextval, 1, 1, 1, 5, '02/03/2020 11:40:00');

INSERT INTO consultation (consultation_id, doctor_id, patient_id, clinic_id, diagnostic_id, consultation_date)
VALUES (SEC_CONSULTATION.nextval, 2, 2, 1, 3, '07/05/2020 10:30:00');

INSERT INTO consultation (consultation_id, doctor_id, patient_id, clinic_id, diagnostic_id, consultation_date)
VALUES (SEC_CONSULTATION.nextval, 4, 1, 1, 11, '09/03/2020 12:00:00');

INSERT INTO consultation (consultation_id, doctor_id, patient_id, clinic_id, diagnostic_id, consultation_date)

```

VALUES (SEC_CONSULTATION.nextval, 3, 2, 1, 2, '03/04/2020 13:20:00');

INSERT INTO consultation (consultation_id, doctor_id, patient_id, clinic_id, diagnostic_id, consultation_date)
VALUES (SEC_CONSULTATION.nextval, 8, 4, 2, 4, '02/06/2020 14:40:00');

INSERT INTO consultation (consultation_id, doctor_id, patient_id, clinic_id, diagnostic_id, consultation_date)
VALUES (SEC_CONSULTATION.nextval, 9, 3, 2, 7, '02/07/2020 12:50:00');

INSERT INTO consultation (consultation_id, doctor_id, patient_id, clinic_id, diagnostic_id, consultation_date)
VALUES (SEC_CONSULTATION.nextval, 10, 5, 3, 6, '04/04/2020 11:15:00');

INSERT INTO consultation (consultation_id, doctor_id, patient_id, clinic_id, diagnostic_id, consultation_date)
VALUES (SEC_CONSULTATION.nextval, 15, 6, 3, 1, '08/04/2020 10:35:00');

INSERT INTO consultation (consultation_id, doctor_id, patient_id, clinic_id, diagnostic_id, consultation_date)
VALUES (SEC_CONSULTATION.nextval, 17, 7, 4, 9, '09/19/2020 10:30:00');

INSERT INTO consultation (consultation_id, doctor_id, patient_id, clinic_id, diagnostic_id, consultation_date)
VALUES (SEC_CONSULTATION.nextval, 11, 6, 4, 15, '09/04/2020 12:20:00');

INSERT INTO consultation (consultation_id, doctor_id, patient_id, clinic_id, diagnostic_id, consultation_date)
VALUES (SEC_CONSULTATION.nextval, 19, 8, 5, 13, '05/14/2020 17:00:00');

INSERT INTO consultation (consultation_id, doctor_id, patient_id, clinic_id, diagnostic_id, consultation_date)
VALUES (SEC_CONSULTATION.nextval, 10, 9, 5, 8, '09/20/2020 15:30:00');

	CONSULTATION_ID	DOCTOR_ID	PATIENT_ID	CLINIC_ID	DIAGNOSTIC_ID	CONSULTATION_DATE
1	1	1	1	1	5	02/21/2020 12:20:00
2	2	2	2	1	3	07/05/2020 10:30:00
3	3	4	1	1	11	09/03/2020 12:00:00
4	4	3	2	1	2	03/04/2020 13:20:00
5	5	8	4	2	4	02/06/2020 14:40:00
6	6	9	3	2	7	02/07/2020 12:50:00
7	7	10	5	3	6	04/04/2020 11:15:00
8	8	15	6	3	1	08/04/2020 10:35:00
9	9	17	7	4	9	09/19/2020 10:30:00
10	10	11	6	4	15	09/04/2020 12:20:00
11	11	19	8	5	13	05/14/2020 17:00:00
12	12	10	9	5	8	09/20/2020 15:30:00

Exercițiul 6

--afișați toate specializarile cu pretul cuprins între x și y

```
CREATE OR REPLACE PROCEDURE specializations_price (
  x NUMBER,
  y NUMBER
) IS
  TYPE index_table IS
    TABLE OF VARCHAR2(40) INDEX BY PLS_INTEGER;
  v_specializations index_table;
  v_exception EXCEPTION;
BEGIN
```

```

SELECT name
BULK COLLECT
INTO v_specializations
FROM specialization
WHERE price <= y AND price >= x;

IF v_specializations.count = 0 THEN
    RAISE v_exception;
END IF;
dbms_output.put_line('Specializarile sunt:');

FOR i IN v_specializations.first..v_specializations.last LOOP
    dbms_output.put_line(v_specializations(i));
END LOOP;

EXCEPTION
    WHEN v_exception THEN
        raise_application_error(-20000, 'Nu exista asemenea specializari');
    WHEN OTHERS THEN
        raise_application_error(-20002, 'Alta eroare!');
END;

SET SERVEROUTPUT ON;

BEGIN
    specializations_price(200, 250);
END;

```

```

Procedure SPECIALIZATIONS_PRICE compiled

Specializarile sunt:
Dermatologie
Cardiologie
Pediatrie
Endocrinologie
Imunologie

PL/SQL procedure successfully completed.

```

```

BEGIN
    specializations_price(0, 30); --eroare
END;

```

```

Error starting at line : 40 in command -
BEGIN
    specializations_price(0, 30);--eroare
END;
Error report -
ORA-20000: Nu exista asemenea specializari
ORA-06512: at "PROJECT.SPECIALIZATIONS_PRICE", line 27
ORA-06512: at line 2
20000. 00000 - "%s"
*Cause:      The stored procedure 'raise_application_error'
              was called which causes this error to be generated.
*Action:     Correct the problem as described in the error message or contact
              the application administrator or DBA for more information.

```

Exercițiul 7

--obtineti toate progmarile dintr-o anumita luna

```
CREATE OR REPLACE PROCEDURE consultations (
    v_month NUMBER
) IS

    CURSOR consult IS
    SELECT
        consultation_id,
        doctor_id,
        patient_id,
        clinic_id,
        diagnostic_id,
        consultation_date
    FROM consultation
    WHERE v_month = EXTRACT(MONTH FROM consultation_date)
    ORDER BY consultation_date;

    v_exception1 EXCEPTION;
    v_exception2 EXCEPTION;
    v_nr INT := 0;

BEGIN

    IF v_month <= 0 OR v_month > 12 THEN
        RAISE v_exception1;
    ELSE
        FOR i IN consult LOOP
            v_nr := v_nr + 1;
            dbms_output.put_line('Consultatia nr ' || i.consultation_id);
            dbms_output.put_line('Doctor: ' || i.doctor_id);
            dbms_output.put_line('Patient: ' || i.patient_id);
            dbms_output.put_line('Clinic: ' || i.clinic_id);
            dbms_output.put_line('Diagnostic: ' || i.diagnostic_id);
            dbms_output.put_line('Date: ' || i.consultation_date);
            dbms_output.new_line();
        END LOOP;
    END IF;

    IF v_nr = 0 THEN
        RAISE v_exception2;
    END IF;

EXCEPTION
    WHEN v_exception2 THEN
        raise_application_error(-20000, 'Nu exista consultatii in luna respectiva');
    WHEN v_exception1 THEN
        raise_application_error(-20000, 'Luna ' || v_month || ' nu este valida');
    WHEN OTHERS THEN
        raise_application_error(-20002, 'Alta eroare!');
END;
```



```
BEGIN
    consultations(4);
END;
```

```
Procedure CONSULTATIONS compiled
```

```
Consultatia nr 7
Doctor: 10
Patient: 5
Clinic: 3
Diagnostic: 6
Date: 04/04/2020 11:15:00
```

```
PL/SQL procedure successfully completed.
```

```
BEGIN
    consultations(0); --eroare
END;
```

```
Error starting at line : 102 in command -
BEGIN
    consultations(0); --eroare
END;
Error report -
ORA-20000: Luna 0 nu este valida
ORA-06512: at "PROJECT.CONSULTATIONS", line 46
ORA-06512: at line 2
20000. 00000 - "%s"
*Cause:      The stored procedure 'raise_application_error'
              was called which causes this error to be generated.
*Action:     Correct the problem as described in the error message or contact
              the application administrator or DBA for more information.
```

```
BEGIN
    consultations(11); --eroare
END;
```

```
Error starting at line : 105 in command -
BEGIN
    consultations(11); --eroare
END;
Error report -
ORA-20000: Nu exista consultatii in luna respectiva
ORA-06512: at "PROJECT.CONSULTATIONS", line 44
ORA-06512: at line 2
20000. 00000 - "%s"
*Cause:      The stored procedure 'raise_application_error'
              was called which causes this error to be generated.
*Action:     Correct the problem as described in the error message or contact
              the application administrator or DBA for more information.
```

Exercițiul 8

--returnati nr pacintilor diagnosticati cu un diagnostic dat ca parametru si au peste x ani

```
CREATE OR REPLACE FUNCTION patients (
  v_name  diagnostic.name%TYPE,
  v_age   patient.age%TYPE
)
RETURN NUMBER IS
  nr NUMBER;
  v_exception1 EXCEPTION;
  v_exception2 EXCEPTION;

BEGIN
  SELECT COUNT(p.patient_id)
  INTO nr
  FROM
    diagnostic  d,
    patient    p,
    consultation c
  WHERE
    p.patient_id = c.patient_id
    AND c.diagnostic_id = d.diagnostic_id
    AND p.age >= v_age
    AND d.name = v_name;

  IF v_age <= 0 THEN
    RAISE v_exception1;
  END IF;

  IF nr = 0 THEN
    RAISE v_exception2;
  END IF;

  RETURN nr;

EXCEPTION
  WHEN v_exception2 THEN
    raise_application_error(-20000, 'Nu exista pacienți cu aceste date');
  WHEN v_exception1 THEN
    raise_application_error(-20000, 'Varsta nu poate fi negativa');
  WHEN OTHERS THEN
    raise_application_error(-20002, 'Alta eroare!');
END patients;

BEGIN
  dbms_output.put_line('Numarul pacientilor este ' || patients('Hipertensiune', 15));
END;
```

Errors: check compiler log

Function PATIENTS compiled

Numarul pacientilor este 1

PL/SQL procedure successfully completed.

BEGIN

```

dbms_output.put_line('Numarul pacientilor este ' || patients('Hipertensiune', -15));
END;

```

```

Error starting at line : 157 in command -
BEGIN
  dbms_output.put_line('Numarul pacientilor este ' || patients('Hipertensiune', -15));
END;
Error report -
ORA-20000: Varsta nu poate fi negativa
ORA-06512: at "PROJECT.PATIENTS", line 37
ORA-06512: at line 2
20000. 00000 - "%s"
*Cause:      The stored procedure 'raise_application_error'
              was called which causes this error to be generated.
*Action:     Correct the problem as described in the error message or contact
              the application administrator or DBA for more information.

```

```

BEGIN
  dbms_output.put_line('Numarul pacientilor este ' || patients('Hipertensiune', 101));
END;

```

```

Error starting at line : 161 in command -
BEGIN
  dbms_output.put_line('Numarul pacientilor este ' || patients('Hipertensiune', 101));
END;
Error report -
ORA-20000: Nu exista pacienti cu aceste date
ORA-06512: at "PROJECT.PATIENTS", line 35
ORA-06512: at line 2
20000. 00000 - "%s"
*Cause:      The stored procedure 'raise_application_error'
              was called which causes this error to be generated.
*Action:     Correct the problem as described in the error message or contact
              the application administrator or DBA for more information.

```

Exercițiul 9

--Afișati specializarile unei clinici cu un nume dat

```

CREATE OR REPLACE PROCEDURE specializations_clinic (
  v_name clinic.name%TYPE
) IS
  TYPE index_table IS
    TABLE OF VARCHAR2(40) INDEX BY PLS_INTEGER;
  specializations index_table;
  v_exception      EXCEPTION;
  v_nr             INT := 0;
  v_num            clinic.name%TYPE;
BEGIN
  SELECT name
  INTO v_num
  FROM clinic

```

```

WHERE name = v_name;

SELECT s.name
BULK COLLECT
INTO specializations
FROM
    clinic          c,
    works_on        wc,
    doctor           d,
    has_specialization hs,
    specialization   s
WHERE
    c.name = v_name
    AND c.clinic_id = wc.clinic_id
    AND wc.doctor_id = d.doctor_id
    AND d.doctor_id = hs.doctor_id
    AND hs.specialization_id = s.specialization_id;

IF specializations.count = 0 THEN
    RAISE v_exception;
END IF;

dbms_output.put_line('Clinica ' || v_name);
dbms_output.new_line();

FOR i IN specializations.first..specializations.last LOOP
    dbms_output.put_line(specializations(i));
END LOOP;

dbms_output.new_line();
EXCEPTION
    WHEN v_exception THEN
        raise_application_error(-20000, 'Nu exista specializari la clinica respectiva');
    WHEN too_many_rows THEN
        raise_application_error(-20000, 'Exista mai multe clinici cu acest nume');
    WHEN OTHERS THEN
        raise_application_error(-20002, 'Alta eroare!');
END;

BEGIN
    specializations_clinic('Medlife');
END;

```



```

Procedure SPECIALIZATIONS_CLINIC compiled
Clinica Medlife
Cardiologie
Medicina Interna
Endocrinologie
Dermatologie
Oftalmologie
O.R.L.
Alergologie
Imunologie
PL/SQL procedure successfully completed.

```

```
BEGIN
    specializations_clinic('Uni Clinic');
END;
```

```
Error starting at line : 227 in command -
BEGIN
    specializations_clinic('Uni Clinic');
END;
Error report -
ORA-20000: Exista mai multe clinici cu acest nume
ORA-06512: at "PROJECT.SPECIALIZATIONS_CLINIC", line 49
ORA-06512: at line 2
20000. 00000 - "%s"
*Cause:      The stored procedure 'raise_application_error'
              was called which causes this error to be generated.
*Action:     Correct the problem as described in the error message or contact
              the application administrator or DBA for more information.
```

```
BEGIN
    specializations_clinic('Clinica');
END;
```

```
Error starting at line : 230 in command -
BEGIN
    specializations_clinic('Clinica');
END;
Error report -
ORA-20000: Nu exista specializari la clinica respectiva
ORA-06512: at "PROJECT.SPECIALIZATIONS_CLINIC", line 47
ORA-06512: at line 2
20000. 00000 - "%s"
*Cause:      The stored procedure 'raise_application_error'
              was called which causes this error to be generated.
*Action:     Correct the problem as described in the error message or contact
              the application administrator or DBA for more information.
```

Exercițiul 10

--nu pot fi adaugate consultații duminica, sambata și nici în restul zilelor între orele 20 și 8

```
CREATE OR REPLACE TRIGGER trig1 BEFORE
    INSERT OR UPDATE OR DELETE ON consultation
BEGIN
    IF ( to_char(sysdate, 'D') = 1 ) OR ( to_char(sysdate, 'D') = 7 ) OR ( to_char(sysdate, 'HH24') NOT BETWEEN
8 AND 20 ) THEN
        IF inserting THEN
            raise_application_error(-20001, 'Inserarea in tabel este permisă doar în timpul programului de lucru!');
        ELSIF deleting THEN
            raise_application_error(-20002, 'Ștergerea din tabel este permisă doar în timpul programului de lucru!');
        ELSE
            raise_application_error(-20003, 'Actualizările în tabel sunt permise doar în timpul programului de lucru!');
        END IF;
    END IF;
END;
```

```
DELETE consultation
WHERE
    clinic_id = 2;
```

Trigger TRIG1 compiled

Error starting at line : 253 in command -

DELETE consultation

WHERE

clinic_id = 2

Error report -

ORA-20002: Stergerea din tabel este permisa doar in timpul programului de lucru!

ORA-06512: at "PROJECT.TRIG1", line 6

ORA-04088: error during execution of trigger 'PROJECT.TRIG1'

Exercițiul 11

--nu poate fi modificata data consultatiei cu o data mai mare decat cea actuala

```
CREATE OR REPLACE TRIGGER trig2 BEFORE
    UPDATE OF consultation_date ON consultation
    FOR EACH ROW
    WHEN ( new.consultation_date > sysdate )
BEGIN
    raise_application_error(-20002, 'Data nu poate fi modificata');
END;
/
```

```
UPDATE consultation
SET consultation_date = '02/21/2020 12:20:00'
WHERE consultation_id = 1;
```

Trigger TRIG1 compiled

1 row updated.

```
UPDATE consultation
SET consultation_date = '08/21/2021 12:20:00'
WHERE consultation_id = 1;
```

```

Error starting at line : 273 in command -
UPDATE consultation
SET consultation_date = '02/21/2021 12:20:00'
WHERE consultation_id = 1
Error report -
ORA-20002: Data nu poate fi modificata
ORA-06512: at "PROJECT.TRIG2", line 2
ORA-04088: error during execution of trigger 'PROJECT.TRIG2'

```

Exercițiul 12

```

CREATE OR REPLACE TRIGGER trig3 AFTER DROP OR ALTER ON SCHEMA BEGIN
    raise_application_error(-20002, 'Nu poti sterge sau modifica tabelele');
    ROLLBACK;
END;

DROP TABLE has_specialization;

```

```

Trigger TRIG3 compiled

Error starting at line : 284 in command -
DROP TABLE has_specialization
Error report -
ORA-00604: error occurred at recursive SQL level 1
ORA-20002: Nu poti sterge sau modifica tabelele
ORA-06512: at line 2
00604. 00000 - "error occurred at recursive SQL level %s"
*Cause:      An error occurred while processing a recursive SQL statement
              (a statement applying to internal dictionary tables).
*Action:     If the situation described in the next error on the stack
              can be corrected, do so; otherwise contact Oracle Support.

```

Exercițiul 13

```

CREATE OR REPLACE PACKAGE pachet AS
    PROCEDURE specializations_price (
        x NUMBER,
        y NUMBER
    );

    PROCEDURE consultations (
        v_month NUMBER
    );

    FUNCTION patients (
        v_name diagnostic.name%TYPE,
        v_age patient.age%TYPE
    ) RETURN NUMBER;

    PROCEDURE specializations_clinic (
        v_name clinic.name%TYPE
    );

```

END pachet;

CREATE OR REPLACE PACKAGE BODY pachet AS

```
PROCEDURE specializations_price (
  x  NUMBER,
  y  NUMBER
) IS
  TYPE index_table IS
    TABLE OF VARCHAR2(40) INDEX BY PLS_INTEGER;
  v_specializations index_table;
  v_exception EXCEPTION;
BEGIN

  SELECT name
  BULK COLLECT
  INTO v_specializations
  FROM specialization
  WHERE price <= y AND price >= x;

  IF v_specializations.count = 0 THEN
    RAISE v_exception;
  END IF;
  dbms_output.put_line('Specializarile sunt:');

  FOR i IN v_specializations.first..v_specializations.last LOOP
    dbms_output.put_line(v_specializations(i));
  END LOOP;

EXCEPTION
  WHEN v_exception THEN
    raise_application_error(-20000, 'Nu exista asemenea specializari');
  WHEN OTHERS THEN
    raise_application_error(-20002, 'Alta eroare!');
END;

PROCEDURE consultations (
  v_month NUMBER
) IS

  CURSOR consult IS
  SELECT
    consultation_id,
    doctor_id,
    patient_id,
    clinic_id,
    diagnostic_id,
    consultation_date
  FROM consultation
  WHERE v_month = EXTRACT(MONTH FROM consultation_date)
  ORDER BY consultation_date;

  v_exception1 EXCEPTION;
  v_exception2 EXCEPTION;
  v_nr INT := 0;

BEGIN
  IF v_month <= 0 OR v_month > 12 THEN
```



```

        RAISE v_exception1;
ELSE
    FOR i IN consult LOOP
        v_nr := v_nr + 1;
        dbms_output.put_line('Consultatia nr ' || i.consultation_id);
        dbms_output.put_line('Doctor: ' || i.doctor_id);
        dbms_output.put_line('Patient: ' || i.patient_id);
        dbms_output.put_line('Clinic: ' || i.clinic_id);
        dbms_output.put_line('Diagnostic: ' || i.diagnostic_id);
        dbms_output.put_line('Date: ' || i.consultation_date);
        dbms_output.new_line();
    END LOOP;
END IF;

IF v_nr = 0 THEN
    RAISE v_exception2;
END IF;

EXCEPTION
    WHEN v_exception2 THEN
        raise_application_error(-20000, 'Nu exista consultatii in luna respectiva');
    WHEN v_exception1 THEN
        raise_application_error(-20000, 'Luna ' || v_month || ' nu este valida');

    WHEN OTHERS THEN
        raise_application_error(-20002, 'Alta eroare!');
END;

FUNCTION patients (
    v_name  diagnostic.name%TYPE,
    v_age   patient.age%TYPE
) RETURN NUMBER IS
    nr NUMBER;
    v_exception1 EXCEPTION;
    v_exception2 EXCEPTION;
BEGIN
    SELECT COUNT(p.patient_id)
    INTO nr
    FROM
        diagnostic  d,
        patient     p,
        consultation c
    WHERE
        p.patient_id = c.patient_id
        AND c.diagnostic_id = d.diagnostic_id
        AND p.age >= v_age
        AND d.name = v_name;

    IF v_age <= 0 THEN
        RAISE v_exception1;
    END IF;

    IF nr = 0 THEN
        RAISE v_exception2;
    END IF;

    RETURN nr;

```

```

EXCEPTION
    WHEN v_exception2 THEN
        raise_application_error(-20000, 'Nu exista pacienti cu aceste date');
    WHEN v_exception1 THEN
        raise_application_error(-20000, 'Varsta nu poate fi negativa');
    WHEN OTHERS THEN
        raise_application_error(-20002, 'Alta eroare!');
END patients;

PROCEDURE specializations_clinic (
    v_name clinic.name%TYPE
) IS

    TYPE index_table IS
        TABLE OF VARCHAR2(40) INDEX BY PLS_INTEGER;
    specializations index_table;
    v_exception EXCEPTION;
    v_nr            INT := 0;
    v_num           clinic.name%TYPE;
BEGIN

    SELECT name
    INTO v_num
    FROM clinic
    WHERE name = v_name;

    SELECT s.name
    BULK COLLECT
    INTO specializations
    FROM
        clinic      c,
        works_on    wc,
        doctor       d,
        has_specialization hs,
        specialization s
    WHERE
        c.name = v_name
        AND c.clinic_id = wc.clinic_id
        AND wc.doctor_id = d.doctor_id
        AND d.doctor_id = hs.doctor_id
        AND hs.specialization_id = s.specialization_id;

    IF specializations.count = 0 THEN
        RAISE v_exception;
    END IF;

    dbms_output.put_line('Clinica ' || v_name);
    dbms_output.new_line();

    FOR i IN specializations.first..specializations.last LOOP
        dbms_output.put_line(specializations(i));
    END LOOP;

    dbms_output.new_line();

EXCEPTION
    WHEN v_exception THEN
        raise_application_error(-20000, 'Nu exista specializari la clinica respectiva');

```

```

    WHEN too_many_rows THEN
        raise_application_error(-20000, 'Exista mai multe clinici cu acest nume');
    WHEN OTHERS THEN
        raise_application_error(-20002, 'Alta eroare!');
END;

```

END pachet;

BEGIN

```

    pachet.specializations_price(200, 250);
    dbms_output.new_line();

```

```

    pachet.consultations(3);
    dbms_output.new_line();

```

```

    dbms_output.put_line('Numarul pacientilor este ' || pachet.patients('Hipertensiune', 15));
    dbms_output.new_line();

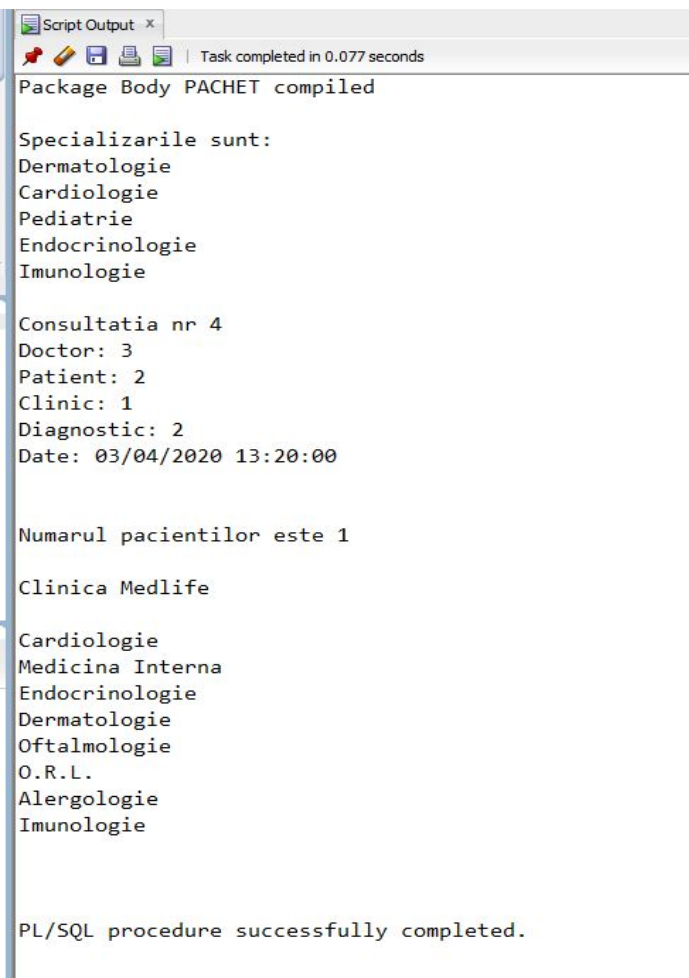
```

```

    pachet.specializations_clinic('Medlife');

```

END;



```

Script Output x
Task completed in 0.077 seconds
Package Body PACHET compiled

Specializarile sunt:
Dermatologie
Cardiologie
Pediatrie
Endocrinologie
Imunologie

Consultatia nr 4
Doctor: 3
Patient: 2
Clinic: 1
Diagnostic: 2
Date: 03/04/2020 13:20:00

Numarul pacientilor este 1

Clinica Medlife

Cardiologie
Medicina Interna
Endocrinologie
Dermatologie
Oftalmologie
O.R.L.
Alergologie
Imunologie

PL/SQL procedure successfully completed.

```