Proiect Baze de Date

Am efectuat o schema simpla a unei baze de date care ar putea fi folosita intr-o agentie de turism, aceasta contine 6 tabele de baza: Angajati , Clienti , Rezervari , Zboruri, Cazari si Plati.

In tabela ‘Angajati’ se introduc datele personale ale acestora precum numele, prenumele, data angajare.

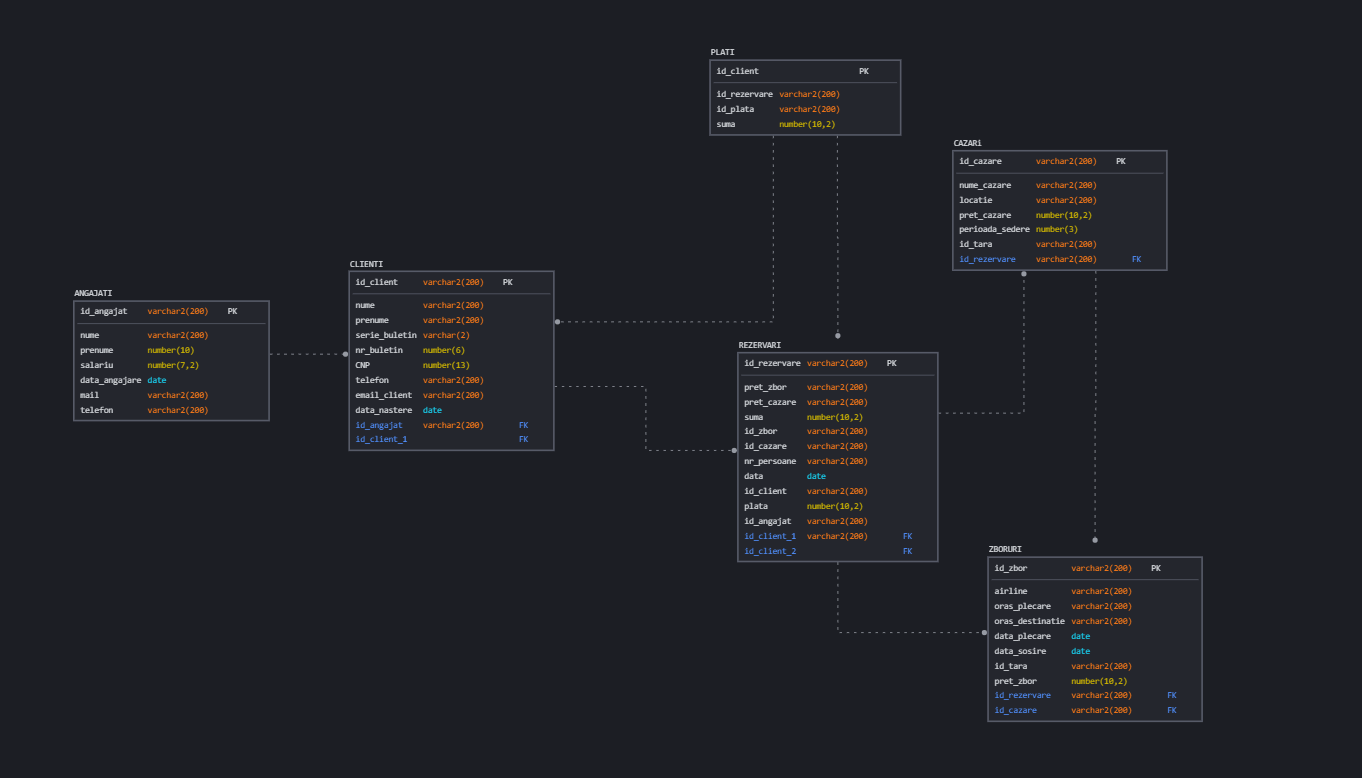
In tabela ‘Clienti’ se introduc datele personale ale clientilor precum numele, serie si numar buletin, CNP.

In tabela ’Zboruri’ se introduc datele principale precum compania aeriana, pretul, data tur-retur.

In tabela ‘ Cazari’ se introduc datele principale ale cazarii precum perioada de sedere, numele cazarii si pretul.

In tabela ‘Rezervari’ se regasesc informatiile de la ‘Zboruri’ si ‘Cazari’

In tabele ‘Plati’ se poate vedea suma care trebuie platita de fiecare client.



--Se efectueaza crearea tabelelor mentionate.

create table P\_Angajati(

id\_angajat varchar2(3),

nume varchar2(20) not null ,

prenume varchar2(20) not null,

salariul number(7,2) not null,

data\_angajare date not null,

email varchar2(30) not null,

telefon varchar2(15) not null,

constraint id\_angajat\_pk primary key(id\_angajat)

);

create table P\_Clienti (

id\_client varchar2(3),

nume varchar2(20) not null,

serie\_buletin varchar2(2) not null,

nr\_buletin varchar2(6) not null,

CNP number(13) unique not null,

telefon number(10) not null,

email\_client varchar2(20) not null,

data\_nastere date not null,

constraint id\_client\_pk primary key(id\_client)

);

create table P\_Zboruri(

id\_zbor varchar2(10),

airline varchar2(20) not null,

oras\_plecare varchar2(20) not null,

oras\_destinatie varchar2(20) not null,

data\_plecare date not null,

data\_sosire date not null,

tara varchar2(20) not null,

pret\_zbor number(10,2) not null,

constraint id\_zbor\_pk primary key(id\_zbor)

);

create table P\_Cazari(

id\_cazare varchar2(10),

nume\_cazare varchar2(20) not null ,

locatie varchar2(20) not null,

pret\_cazare number(10,2) not null,

perioada\_sedere number(3) not null ,

id\_tara varchar2(3) not null,

constraint id\_cazare\_pk primary key(id\_cazare)

);

create table P\_Rezervari(

id\_rezervare varchar2(10),

pret\_zbor number(10,2) not null,

pret\_cazare number(10 ,2) not null ,

suma number(10 ,2) not null ,

id\_zbor varchar2(10) not null,

id\_cazare varchar2(10) not null,

nr\_persoane number(3) not null ,

data\_rezervare date not null,

id\_client varchar2(3) not null ,

plata\_efectuata number(1) default 0 not null,

id\_angajat varchar2(3) not null,

foreign key(id\_client) references P\_Clienti(id\_client),

foreign key(id\_zbor) references P\_Zboruri(id\_zbor),

foreign key(id\_cazare) references P\_Cazari(id\_cazare),

constraint id\_rezervare\_pk primary key(id\_rezervare)

);

create table P\_Plati(

id\_client varchar(3) not null,

id\_rezervare varchar(10) not null ,

id\_plata varchar2(10),

suma number(10 ,2) not null ,

foreign key(id\_client) references P\_Clienti(id\_client),

constraint id\_plata\_pk primary key(id\_plata)

);

-- Adăugarea angajatilor în tabelul P\_Angajati

INSERT INTO P\_Angajati (id\_angajat, nume, prenume, salariul, data\_angajare, email, telefon)

VALUES ('001', 'Popescu', 'Ion', 5000, TO\_DATE('2023-01-01', 'YYYY-MM-DD'), 'ion.popescu@email.com', '0722000000');

INSERT INTO P\_Angajati (id\_angajat, nume, prenume, salariul, data\_angajare, email, telefon)

VALUES ('002', 'Simionescu', 'Alexandru', 4500, TO\_DATE('2023-02-01', 'YYYY-MM-DD'), 'alex.simi@email.com', '0723204212');

INSERT INTO P\_Angajati (id\_angajat, nume, prenume, salariul, data\_angajare, email, telefon)

VALUES ('003', 'Spulber', 'Adrian', 7000, TO\_DATE('2023-01-01', 'YYYY-MM-DD'), 'adrian@email.com', '0732282784');

INSERT INTO P\_Angajati (id\_angajat, nume, prenume, salariul, data\_angajare, email, telefon)

VALUES ('004', 'Selavardeanu ', 'Adrian', 5000, TO\_DATE('2023-01-01', 'YYYY-MM-DD'), 'sela@email.com', '0722241424');

INSERT INTO P\_Angajati (id\_angajat, nume, prenume, salariul, data\_angajare, email, telefon)

VALUES ('005', 'Spulber', 'Marius', 5500, TO\_DATE('2023-01-01', 'YYYY-MM-DD'), 'marius@email.com', '0722142414');

-- Adăugarea clientilor în tabelul P\_Clienti

INSERT INTO P\_Clienti (id\_client, nume, serie\_buletin, nr\_buletin, CNP, telefon, email\_client, data\_nastere)

VALUES ('C01', 'Ionescu', 'AB', '123456', 1234567890123, '0733000000', 'ionescu@email.com', TO\_DATE('1980-02-15', 'YYYY-MM-DD'));

INSERT INTO P\_Clienti (id\_client, nume, prenume, serie\_buletin, nr\_buletin, CNP, telefon, email\_client, data\_nastere)

VALUES ('C02', 'Gigi', 'Alecu' , 'VN', '123456', 1234567890567, '0733000002', 'alecu.gigi@email.com', TO\_DATE('2000-02-16', 'YYYY-MM-DD'));

INSERT INTO P\_Clienti (id\_client, nume, prenume , serie\_buletin, nr\_buletin, CNP, telefon, email\_client, data\_nastere)

VALUES ('C03', 'Tataru', 'Gabriela' , 'BC', '123456', 1234567890568, '0733000003', 'gabi@email.com', TO\_DATE('1975-07-15', 'YYYY-MM-DD'));

INSERT INTO P\_Clienti (id\_client, nume, prenume , serie\_buletin, nr\_buletin, CNP, telefon, email\_client, data\_nastere)

VALUES ('C04', 'Stangaciu',' Loredana' , 'CV', '123456', 1234567890569, '0733000004', 'lore@email.com', TO\_DATE('1986-09-23', 'YYYY-MM-DD'));

-- Adăugarea zborurilor în tabelul P\_Zboruri

INSERT INTO P\_Zboruri (id\_zbor, airline, oras\_plecare, oras\_destinatie, data\_plecare, data\_sosire, tara, pret\_zbor)

VALUES ('ZB01', 'Airline1', 'Bucuresti', 'Paris', TO\_DATE('2023-12-01', 'YYYY-MM-DD'), TO\_DATE('2023-12-02', 'YYYY-MM-DD'), 'Franta', 150.00);

INSERT INTO P\_Zboruri (id\_zbor, airline, oras\_plecare, oras\_destinatie, data\_plecare, data\_sosire, tara, pret\_zbor)

VALUES ('ZB02', 'Lufthansa', 'Bucuresti', 'Milano', TO\_DATE('2023-07-17', 'YYYY-MM-DD'), TO\_DATE('2023-08-01', 'YYYY-MM-DD'), 'Italia', 85.00);

INSERT INTO P\_Zboruri (id\_zbor, airline, oras\_plecare, oras\_destinatie, data\_plecare, data\_sosire, tara, pret\_zbor)

VALUES ('ZB03', 'Ryanair', 'Bucuresti', 'Athena', TO\_DATE('2023-10-10', 'YYYY-MM-DD'), TO\_DATE('2023-10-14', 'YYYY-MM-DD'), 'Grecia', 77.00);

INSERT INTO P\_Zboruri (id\_zbor, airline, oras\_plecare, oras\_destinatie, data\_plecare, data\_sosire, tara, pret\_zbor)

VALUES ('ZB04', 'Turkish Air', 'Bucuresti', 'Istanbul', TO\_DATE('2023-04-15', 'YYYY-MM-DD'), TO\_DATE('2023-04-20', 'YYYY-MM-DD'), 'Turcia', 185.00);

-- Adăugarea cazărilor în tabelul P\_Cazari

INSERT INTO P\_Cazari (id\_cazare, nume\_cazare, locatie, pret\_cazare, perioada\_sedere, id\_tara)

VALUES ('CA01', 'Hotel Paris', 'Paris', 300.00, 7, 'FR');

INSERT INTO P\_Cazari (id\_cazare, nume\_cazare, locatie, pret\_cazare, perioada\_sedere, id\_tara)

VALUES ('CA02', 'Hotel Milano', 'Milano', 400.00, 14, 'IT');

INSERT INTO P\_Cazari (id\_cazare, nume\_cazare, locatie, pret\_cazare, perioada\_sedere, id\_tara)

VALUES ('CA03', 'Hotel Athena', 'Athena', 150.00, 4, 'GR');

INSERT INTO P\_Cazari (id\_cazare, nume\_cazare, locatie, pret\_cazare, perioada\_sedere, id\_tara)

VALUES ('CA04', 'Hotel Istanbul', 'Istanbul', 150.00, 5, 'TR');

-- Adăugarea rezervărilor în tabelul P\_Rezervari

INSERT INTO P\_Rezervari (id\_rezervare, pret\_zbor, pret\_cazare, suma, id\_zbor, id\_cazare, nr\_persoane, data\_rezervare, id\_client, plata\_efectuata, id\_angajat)

VALUES ('R01', 150.00, 300.00, 450.00, 'ZB01', 'CA01', 1, TO\_DATE('2023-12-01', 'YYYY-MM-DD'), 'C01', 0, '001');

INSERT INTO P\_Rezervari (id\_rezervare, pret\_zbor, pret\_cazare, suma, id\_zbor, id\_cazare, nr\_persoane, data\_rezervare, id\_client, plata\_efectuata, id\_angajat)

VALUES ('R02', 85.00, 400.00, 485.00, 'ZB02', 'CA02', 1 , TO\_DATE('2023-07-17', 'YYYY-MM-DD'), 'C02', 1, '002');

INSERT INTO P\_Rezervari (id\_rezervare, pret\_zbor, pret\_cazare, suma, id\_zbor, id\_cazare, nr\_persoane, data\_rezervare, id\_client, plata\_efectuata, id\_angajat)

VALUES ('R03', 77.00, 150.00, 227.00, 'ZB03', 'CA03', 1 , TO\_DATE('2023-10-14', 'YYYY-MM-DD'), 'C03', 1, '003');

INSERT INTO P\_Rezervari (id\_rezervare, pret\_zbor, pret\_cazare, suma, id\_zbor, id\_cazare, nr\_persoane, data\_rezervare, id\_client, plata\_efectuata, id\_angajat)

VALUES ('R04', 185.00, 150.00, 335.00, 'ZB04', 'CA04', 1 , TO\_DATE('2023-07-17', 'YYYY-MM-DD'), 'C04', 0, '004');

-- Adăugarea platilor în tabelul P\_Plati

INSERT INTO P\_Plati (id\_client, id\_rezervare, id\_plata, suma)

VALUES ('C01', 'R01', 'P01', 450.00);

INSERT INTO P\_Plati (id\_client, id\_rezervare, id\_plata, suma)

VALUES ('C02', 'R02', 'P02', 485.00);

INSERT INTO P\_Plati (id\_client, id\_rezervare, id\_plata, suma)

VALUES ('C03', 'R03', 'P03', 227.00);

INSERT INTO P\_Plati (id\_client, id\_rezervare, id\_plata, suma)

VALUES ('C04', 'R04', 'P04', 335.00);

--Update la pretul zborului cu id zb01

update P\_zboruri

set pret\_zbor = 140

where id\_zbor = 'ZB01';

--Update la numele companiei aeriene cu id = zb01

update P\_zboruri

set airline = ' Qatar Airways'

where id\_zbor = 'ZB01'

--Modificarea zborului de sosire al id\_zbor = zb01

update P\_Zboruri

set data\_sosire = '12.08.2023'

where id\_zbor = 'ZB01';

--modificare salariului angajatului cu id = 001 la 6000

UPDATE P\_Angajati

SET salariul = 6000

WHERE id\_angajat = '001';

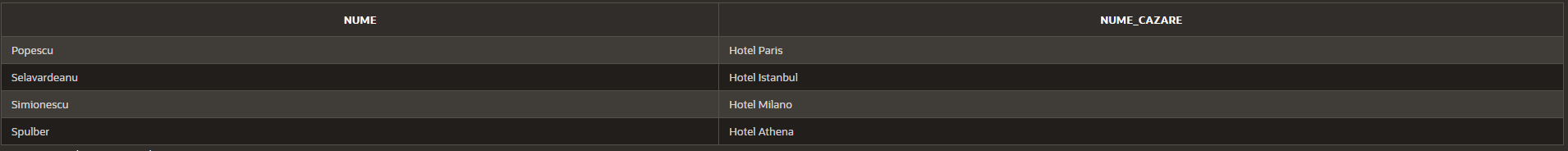
-- afisarea numele angajatului care a rezervat fiecare cazare

SELECT A.nume, C.nume\_cazare

FROM P\_Angajati A

INNER JOIN P\_Rezervari R ON A.id\_angajat = R.id\_angajat

INNER JOIN P\_Cazari C ON R.id\_cazare = C.id\_cazare;

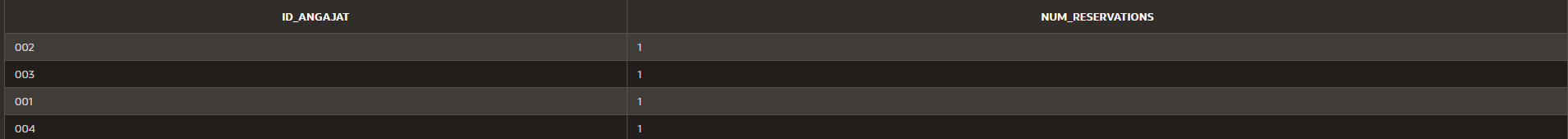


--cate rezervari a facut fiecare angajat

SELECT id\_angajat, COUNT(id\_rezervare) as num\_reservations

FROM P\_Rezervari

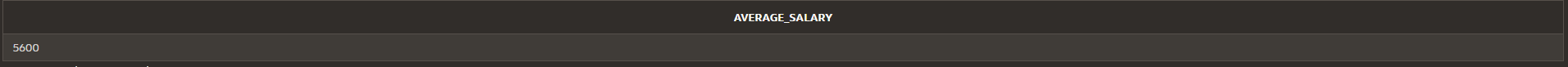
GROUP BY id\_angajat;



--afisarea salariului mediu

SELECT AVG(salariul) as average\_salary

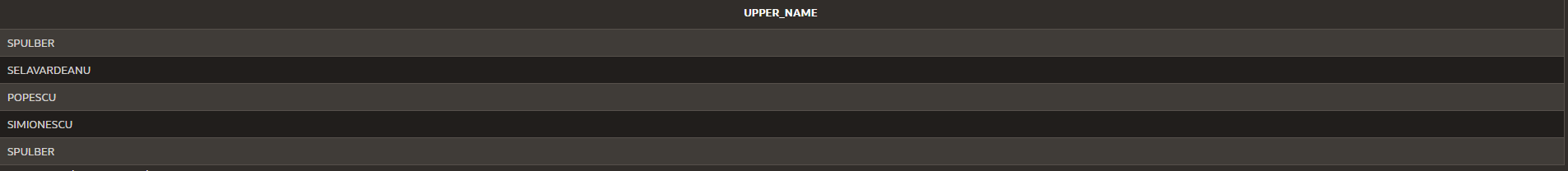
FROM P\_Angajati;



--afisarea numelor angajatilor in uppercase

SELECT UPPER(nume) as upper\_name

FROM P\_Angajati;

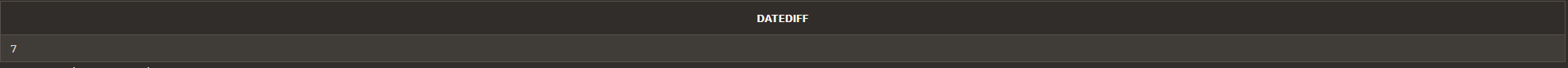


--afisarea numarului de zile intre zborul de plecare si sosire a primului zbor

SELECT TO\_DATE('2023-12-08', 'YYYY-MM-DD') -

TO\_DATE('2023-12-01', 'YYYY-MM-DD') AS DateDiff

FROM dual



-- sa se afiseze salariatii cu salariul mai mare de 5000 de lei ca avand salariul mare si salariatii cu mai putin de 5000 de lei ca avand salariul mic

SELECT nume,

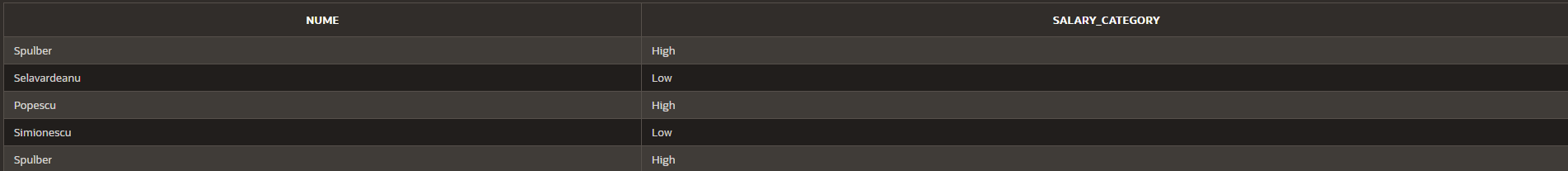
CASE

WHEN salariul > 5000 THEN 'High'

ELSE 'Low'

END as salary\_category

FROM P\_Angajati;



-- sa se afiseze toti angajatii si toti clientii

SELECT nume FROM P\_Angajati

UNION

SELECT nume FROM P\_Clienti;

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Description automatically generated with medium confidence

--A se afisa numele si prenumele clientului care a efectuat rezervarea cu id-ul zborului ‘ZB01’

select nume , prenume

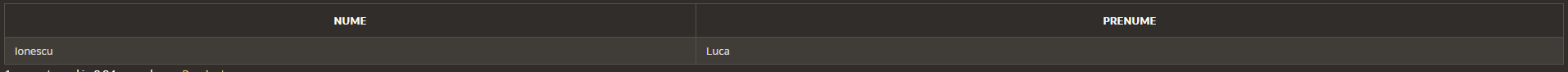
from P\_clienti

where id\_client = (

select id\_client

from P\_rezervari

where id\_zbor = 'ZB01') ;



--A se afisa numele si prenumele clientului care a efectuat rezervarea cu id-ul cazarii ‘CA01’

select nume, prenume

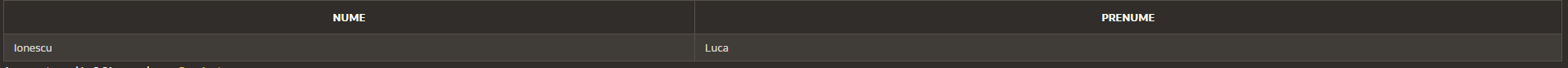
from P\_clienti

where id\_client = (

select id\_client

from P\_rezervari

where id\_cazare = 'CA01');



--A se afisa numele si prenumele angajatului care a facut prima rezervare:

select nume , prenume

from P\_ANGAJATI

WHERE id\_angajat = (

SELECT id\_angajat

from P\_rezervari

where id\_rezervare = 'R01')

