



# PROIECT LA DISCIPLINA BAZE DE DATE

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CLIENTI

ID_CLIENT	NUME	PRENUME	CNP	ADRESA	NUMAR_DE_TELEFON	EMAIL
NUMBER(6)	VARCHAR2(20)	VARCHAR2(20)	NUMBER(13)	VARCHAR2(50)	NUMBER(10)	VARCHAR2(20)

CONTURI

ID_CONT	ID_CLIENT	TIP_CONT	SOLD	DATA_DESCIDERII
NUMBER(6)	NUMBER(6)	VARCHAR2(15)	NUMBER(10)	DATE

IMPRUMUTURI

ID_IMPRUMUT	ID_CLIENT	SUMA_IMPRUMUTATA	DATA_ACORDARII	DATA_SCADENTA	RATA_DOBANZII	SUMA_RAMBURSATA	STATUS
NUMBER(6)	NUMBER(6)	NUMBER(10)	DATE	DATE	NUMBER(4)	NUMBER(10)	VARCHAR2(15)

TRANZACTII

ID_TRANZACTIE	ID_CONT	TIP_TRANZACTIE	SUMA	DATA_TRANZACTIEI	DESCRIERE
NUMBER(6)	NUMBER(6)	VARCHAR2(10)	NUMBER(10)	DATE	VARCHAR2(30)

ORASE

ID_ORAS	NUME_ORAS
NUMBER(6)	VARCHAR2(15)

DEPARTAMENTE

ID_DEPARTAMENT	ID_ORAS	NUME_DEPARTAMENT
NUMBER(6)	NUMBER(6)	VARCHAR2(50)

ANGAJATI

ID_ANGAJAT	ID_DEPARTAMENT	ID_MANAGER	NUME	PRENUME	SALARIU	DATA_ANGAJARII
NUMBER(6)	NUMBER(6)	NUMBER(6)	VARCHAR2(20)	VARCHAR2(20)	NUMBER(10)	DATE

SUCURSALE



ID_SUCURSALE	ID_ORAS	NUME_SUCURSALA	ADRESA
NUMBER(6)	NUMBER(6)	VARCHAR2(15)	VARCHAR2(40)

**Tema proiectului** este reprezentata prin schema unei banci, schitata anterior. Am facut aceasta alegere, deoarece, avand in vedere ca tema trebuia sa fie una economica, banca mi s-a parut unul dintre cele mai ample si concrete exemple.

**Banca** este o instituție financiară care are ca obiect principal de activitate atragerea de depozite și acordarea de credite. Băncile sunt organizate sub forma unei societăți comerciale pe acțiuni și își desfășoară activitatea sub supravegherea băncii centrale.

**Centrala** este centrul operațional al instituției de credit. Centrala este responsabilă pentru elaborarea politicilor și a strategiilor bancare, coordonarea activităților tuturor sucursalelor, filialelor și agențiilor și pentru asigurarea respectării normelor, regulamentelor și legilor bancare în întreaga organizație. Centrala se ocupă de luarea deciziilor strategice și de administrarea riscurilor la nivelul întregii instituții.

**Sucursalele** sunt entități bancare care funcționează ca extensii ale centralei în diferite zone geografice. Deși sunt gestionate de centrală, sucursalele operează cu un nivel oarecare de autonomie. Ele oferă majoritatea serviciilor bancare, cum ar fi depuneri, retrageri, împrumuturi și servicii de consultanță financiară, și sunt în contact direct cu clienții instituției de credit.

**Filialele** sunt entități separate, deși sunt deținute integral sau în proporție majoritară de bancă. Filialele pot oferi servicii similare cu cele ale sucursalelor, dar operează sub propriul lor brand și adesea în sectoare specifice de piață sau în zone geografice unde centrala sau sucursalele nu sunt prezente. Ele au propria lor conducere și pot lua decizii la nivel local, deși direcția strategică și supervizarea generală vin de la centrală.

**Agențiile** sunt unități mai mici ale băncii, de obicei situate în zonele mai puțin populate pentru a furniza servicii bancare comunităților locale. Agențiile oferă servicii limitate comparativ cu sucursalele sau filialele, cum ar fi procesarea tranzacțiilor zilnice sau servicii de bază pentru clienți. Sunt gestionate de sucursale sau direct de către centrală, în funcție de modelul organizațional al băncii.

# CREAREA SI POPULAREA TABELELOR:

## --CREAREA TABELEI CLIENTI

CREATE TABLE Clienti(

```
    id_client number(6),
    Nume varchar2(20),
    Prenume varchar2(20),
    CNP number(13),
    Adresa varchar2(50),
    Numar_de_telefon number(10),
    Email varchar2(20)
```

);

ALTER TABLE Clienti

ADD CONSTRAINT id\_client\_pk primary key(id\_client);

describe Clienti;

The screenshot shows the Oracle SQL Workshop interface. In the top navigation bar, 'APEX' is selected. Below it, 'SQL Workshop' is chosen from the dropdown menu. The main area displays the following SQL code:

```
--CREAREA TABELET CLIENTI
CREATE TABLE Clienti(
    id_client number(6),
    Nume varchar2(20),
    Prenume varchar2(20),
    CNP number(13),
    Adresa varchar2(50),
    Numar_de_telefon number(10),
    Email varchar2(20)
);
describe Clienti;
ALTER TABLE Clienti
--CREAREA TABELET CONTURI
```

Below the code, the 'Results' tab is active, showing the description of the 'CLIENTI' table with its columns and their properties:

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
CLIENTI	ID_CLIENT	NUMBER	-	6	0	1	-	-	-
	NUME	VARCHAR2	20	-	-	-	✓	-	-
	PRENUME	VARCHAR2	20	-	-	-	✓	-	-
	CNP	NUMBER	-	13	0	-	✓	-	-
	ADRESA	VARCHAR2	50	-	-	-	✓	-	-
	NUMAR_DE_TELEFON	NUMBER	-	10	0	-	✓	-	-
	EMAIL	VARCHAR2	20	-	-	-	✓	-	-

At the bottom right of the interface, there is a message: "Activate Windows. Go to Settings to activate Windows." and the text "Oracle APDX 23.23".

## --CREAREA TABELEI CONTURI

CREATE TABLE Conturi(

```
    id_cont number(6) primary key,
```

```

        id_client number(6),
        Tip_cont varchar2(15),
        Sold number(10),
        Data_deschiderii date,
        CONSTRAINT id_client_fk foreign key (id_client) REFERENCES Clienti (id_client)
    );

```

The screenshot shows the Oracle APEX SQL Workshop interface. The top navigation bar includes 'APEX', 'App Builder', 'SQL Workshop' (selected), 'Team Development', and 'Gallery'. The right side shows a schema tree for 'WKSP\_LUNGUR' and various database objects like 'CONTURI', 'IMPRUMUTURI', and 'CLIENTI'. The main area displays the following SQL code:

```

11
12 > ALTER TABLE Clienti...
13 --CREAREA TABLELI CONTURI
14 CREATE TABLE Conturi(
15     id_cont number(6) primary key,
16     id_client number(6),
17     Tip_cont varchar2(15),
18     Sold number(10),
19     Data_deschiderii date,
20     CONSTRAINT id_client_fk foreign key (id_client) REFERENCES Clienti (id_client)
21 );
22
23 --Descriere Conturi
24 --...CREAREA TABLELI IMPRUMUTURI
25 --CREATE TABLE Imprumuturi{...
26
27 > CREATE TABLE Imprumuturi{...

```

Below the code, there are tabs for 'Results', 'Explain', 'Describe', 'Saved SQL', and 'History'. The 'Results' tab is selected, showing a table structure for the 'CONTURI' object. The columns are: Table, Column, Data Type, Length, Precision, Scale, Primary Key, Nullable, Default, and Comment. The data for 'CONTURI' is as follows:

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
CONTURI	ID_CONT	NUMBER	-	6	0	1	-	-	-
	ID_CLIENT	NUMBER	-	6	0	-	✓	-	-
	TIP_CONT	VARCHAR2	15	-	-	-	✓	-	-
	SOLD	NUMBER	-	10	0	-	✓	-	-
	DATA_DESCHIDERII	DATE	7	-	-	-	✓	-	-

At the bottom of the interface, there are links for 'Activate Windows', 'Go to Settings to activate Windows.', 'lungs@lungs22@elcid.ase.ro', 'lungur', and 'Oracle APEX 25.1.1'.

### --CREAREA TABELEI IMPRUMUTURI

```

CREATE TABLE Imprumuturi(
        id_imprumut number(6),
        id_client number(6),
        Suma_imprumutata number(10),
        Data_acordarii date,
        Data_scadenta date,
        Rata_dobanzii number(4),
        Suma_rambursata number(10),
        Status varchar2(15),
        CONSTRAINT id_imprumut_pk primary key (id_imprumut),

```

```

CONSTRAINT fk_id_client foreign key (id_client) REFERENCES Clienti (id_client)
);

```

ALTER TABLE Imprumuturi

```

DROP COLUMN Suma_rambursata;

describe Imprumuturi;

```

The screenshot shows the Oracle APEX SQL Workshop interface. The top navigation bar includes links for APEX, App Builder, SQL Workshop, Team Development, and Gallery. The schema dropdown is set to 'WKSP\_LUNGUR'. The main area contains the following SQL code:

```

30  Suma_imprumutata number(10),
31  Data_acordarii date,
32  Data_scadenta date,
33  Rata_dobanzii number(4),
34  Suma_rambursata number(10),
35  Status varchar2(15),
36  CONSTRAINT id_imprumut_pk primary key (id_imprumut),
37  CONSTRAINT fk_id_client foreign key (id_client) REFERENCES Clienti (id_client)
38  ;

39
40 ALTER TABLE Imprumuturi
41 DROP COLUMN Suma_rambursata;
42 Describe Imprumuturi
43

```

Below the code, the 'Results' tab is selected, showing the table structure for 'IMPRUMUTURI' with the following columns:

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
IMPRUMUTURI	ID_IMPRUMUT	NUMBER	-	6	0	1	-	-	-
	ID_CLIENT	NUMBER	-	6	0	-	✓	-	-
	SUMA_IMPRUMUTATA	NUMBER	-	10	0	-	✓	-	-
	DATA_ACORDARII	DATE	7	-	-	-	✓	-	-
	DATA_SCADENTA	DATE	7	-	-	-	✓	-	-
	RATA_DOBANZII	NUMBER	-	4	0	-	✓	-	-
	STATUS	VARCHAR2	15	-	-	-	✓	-	-

At the bottom right of the results pane, there is a message: "Activate Windows. Go to Settings to activate Windows." The footer of the page includes the URL 'lunguvarus22@elcid.ase.ro', the page title 'lunguvar', and the copyright notice 'Copyright © 1999, 2023, Oracle and/or its affiliates'.

## --CREAREA TABELEI TRANZACTII

```

CREATE TABLE Tranzactii(
    id_tranzactie number(6) primary key,
    id_cont number(6),
    Tip_tranzactie varchar2(10),
    Suma number(10),
    Data_tranzactiei date,
    Descriere varchar2(30)
);

```

ALTER TABLE TRANZACTII

```
DROP COLUMN TIP_TRANZACTIE;
```

```
ALTER TABLE TRANZACTII
```

```
ADD CONSTRAINT id_cont_fk foreign key (id_cont) REFERENCES Conturi (id_cont);
```

```
describe Tranzactii;
```

The screenshot shows the Oracle SQL Workshop interface. In the top navigation bar, 'APEX' is selected, followed by 'SQL Workshop'. The schema dropdown shows 'WKSP\_LUNGUR'. The main area displays the following SQL code:

```
--CREATE TABLE tranzactii
46    id_tranzactie number(6) primary key,
47    id_cont number(6),
48    Tip_tranzactie varchar2(10),
49    Suma number(10),
50    Data_tranzactiei date,
51    Descriere varchar2(30)
52 );
53
54 ALTER TABLE TRANZACTII
55   DROP COLUMN TIP_TRANZACTIE;
56
57 ALTER TABLE TRANZACTII
58   ADD CONSTRAINT id_cont_fk foreign key (id_cont) REFERENCES Conturi (id_cont);
59   describe Tranzactii
60 --CREAREA TABELEI ORASE
```

Below the code, the 'Describe' tab is selected in the results pane, showing the structure of the TRANZACTII table:

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
TRANZACTII	ID_TRANZACTIE	NUMBER	-	6	0	1	-	-	-
	ID_CONT	NUMBER	-	6	0	-	✓	-	-
	SUMA	NUMBER	-	10	0	-	✓	-	-
	DATA_TRANZACTIEI	DATE	7	-	-	-	✓	-	-
	DESCRIERE	VARCHAR2	30	-	-	-	✓	-	-

At the bottom right of the interface, there is a message: "Activate Windows. Go to Settings to activate Windows." and the text "Oracle APEx 23.2.0".

### --CREAREA TABELEI ORASE

```
CREATE TABLE Orase(
```

```
    id_oras number(6) primary key,  
    nume_oras varchar2(15)  
);
```

```
describe Orase;
```

The screenshot shows the Oracle APEX SQL Workshop interface. In the top navigation bar, the user is in the 'SQL Workshop' section. The main area displays a SQL command window with the following code:

```

44 --CREAREA TABELII TRANZACTII
45 > CREATE TABLE Tranzactii(...
52 );
53
54 > ALTER TABLE TRANZACTII ...
57 > ALTER TABLE TRANZACTII ...
58 describe Tranzactii
59
60 --CREAREA TABELII ORASE
61 CREATE TABLE Orase(
62     id_oras number(6) primary key,
63     nume_oras varchar2(15)
64 );
65 describe Orase;
66
67 --CREAREA TABELII DEPARTAMENTE
68 > CREATE TABLE Departamente(

```

Below the code, there are tabs for 'Results', 'Explain', 'Describe', 'Saved SQL', and 'History'. The 'Describe' tab is selected, showing the structure of the 'ORASE' table:

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
ORASE	ID_ORAS	NUMBER	-	6	0	1	-	-	
ORASE	NUME_ORAS	VARCHAR2	15	-	-	-	✓	-	

On the right side of the interface, there is a preview pane showing the results of the query.

### --CREAREA TABELEI DEPARTAMENTE

```

CREATE TABLE Departamente(
    id_departament number(6) primary key,
    id_oras number(6),
    nume_departament varchar2(50)
);

```

ALTER TABLE Departamente

```

ADD CONSTRAINT id_oras_fk FOREIGN KEY (id_oras) REFERENCES Orase(id_oras);
describe Departamente;

```

The screenshot shows the Oracle APEX SQL Workshop interface. In the top navigation bar, 'APEX' is selected. The main area displays the following SQL code:

```

61  );
62  );
63  );
64  );
65  describe Orase;
66
67  --CREAREA TABLEI DEPARTAMENTE
68  CREATE TABLE Departamente(
69      id_departament number(6) primary key,
70      id_oras number(6),
71      nume_departament varchar2(50)
72  );
73
74  ALTER TABLE Departamente
75  ADD CONSTRAINT id_oras_fk FOREIGN KEY (id_oras) REFERENCES Orase(id_oras);
76
77  describe Departamente;
78
79  --CREAREA TABLEI ANGAJATI

```

Below the code, there is a table titled 'DEPARTAMENTE' with three columns: ID\_DEPARTAMENT, ID\_ORAS, and NUME\_DEPARTAMENT. The table structure is as follows:

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
DEPARTAMENTE	ID_DEPARTAMENT	NUMBER	-	6	0	1	-	-	-
	ID_ORAS	NUMBER	-	6	0	-	✓	-	-
	NUME_DEPARTAMENT	VARCHAR2	50	-	-	-	✓	-	-

At the bottom right of the interface, there is a message: 'Activate Windows' and 'Go to Settings to activate Windows.'

### --CREAREA TABLEI ANGAJATI

```

CREATE TABLE Angajati(
    id_angajat number(6) primary key,
    id_departament number(6),
    id_manager number(6),
    Nume varchar2(20),
    Prenume varchar2(20),
    Salariu number(8),
    Data_angajarii date
);

```

### ALTER TABLE ANGAJATI

```

ADD CONSTRAINT id_departament_fk foreign key (id_departament) REFERENCES Departamente
(id_departament);

```

### ALTER TABLE ANGAJATI

```
ADD Varsta number(2);
```

ALTER TABLE ANGAJATI

ADD CONSTRAINT restrictie\_varsta CHECK (Varsta BETWEEN 18 AND 62);

describe Angajati;

The screenshot shows the Oracle APEX SQL Workshop interface. The top navigation bar includes APEX, App Builder, SQL Workshop, Team Development, and Gallery. The SQL Workshop tab is selected. The schema dropdown shows WKSP\_LUNGUV. The main area displays the following SQL code:

```
01  name varchar(20),
02  Prenume varchar(20),
03  Salariu number(8),
04  Data_angajarii date
05  );
06
07  ALTER TABLE ANGAJATI
08  ADD CONSTRAINT id_departament_fk Foreign key (id_departament) REFERENCES Departamente (id_departament);
09
10  ALTER TABLE ANGAJATI
11  ADD Varsta number(2);
12
13  ALTER TABLE ANGAJATI
14  ADD CONSTRAINT restrictie_varsta CHECK (Varsta BETWEEN 18 AND 62);
15
16  Describe Angajati;
17
18
```

Below the code, there is a table titled "Results" showing the structure of the ANGAJATI table:

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
ANGAJATI	ID_ANGAJAT	NUMBER	-	6	0	1	-	-	-
	ID_DEPARTAMENT	NUMBER	-	6	0	-	✓	-	-
	ID_MANAGER	NUMBER	-	6	0	-	✓	-	-
	NUME	VARCHAR2	20	-	-	-	✓	-	-
	PRENUME	VARCHAR2	20	-	-	-	✓	-	-
	SALARIU	NUMBER	-	8	0	-	✓	-	-
	DATA_ANGAJARII	DATE	7	-	-	-	✓	-	-
	VARSTA	NUMBER	-	2	0	-	✓	-	-

At the bottom right of the interface, there is a message: "Activate Windows. Go to Settings to activate Windows." and the text "Oracle APEX 23.3".

### --CREAREA TEBELUI SUCURSALE

CREATE TABLE Sucursale(

id\_sucursala number(6) primary key,

id\_oras number(6),

Nume\_sucursala varchar2(15),

Adresa varchar2(40),

CONSTRAINT fk\_id\_oras FOREIGN KEY (id\_oras) REFERENCES Orase (id\_oras)

);

ALTER TABLE Sucursale

ADD CONSTRAINT fk\_id\_oras FOREIGN KEY (id\_oras) REFERENCES Orase(id\_oras);

DROP TABLE Sucursale;

```

CREATE TABLE Sucursale(
    id_sucursala number(6) primary key,
    id_oras number(6),
    Nume_sucursala varchar2(15),
    CONSTRAINT fk_id_oras FOREIGN KEY (id_oras) REFERENCES Orase (id_oras)
);

```

ALTER TABLE Sucursale

ADD Adresa varchar2(40);

describe Sucursale;

The screenshot shows the Oracle APEX SQL Workshop interface. The top navigation bar includes 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'Gallery'. The right side shows a schema tree for 'WKSP\_LUNGUV' and a preview of the table structure. The main area displays the following SQL code:

```

100 ALTER TABLE Sucursale
101   ADD CONSTRAINT fk_id_oras FOREIGN KEY (id_oras) REFERENCES Orase(id_oras);
102
103 DROP TABLE Sucursale;
104
105 CREATE TABLE Sucursale(
106   id_sucursala number(6) primary key,
107   id_oras number(6),
108   Nume_sucursala varchar2(15),
109   CONSTRAINT fk_id_oras FOREIGN KEY (id_oras) REFERENCES Orase (id_oras)
110 );
111
112 ALTER TABLE Sucursale
113   ADD Adresa varchar2(40);
114
115 describe Sucursale;

```

Below the code, there are tabs for 'Results', 'Explain', 'Describe', 'Saved SQL', and 'History'. The 'Describe' tab is selected, showing the table structure:

Object Type	Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
SUCURSAL	ID_SUCURSALA	NUMBER	-	6	0	-	1	-	-	-
	ID_ORAS	NUMBER	-	6	0	-	-	✓	-	-
	NUME_SUCURSALA	VARCHAR2	15	-	-	-	-	✓	-	-
	ADRESA	VARCHAR2	40	-	-	-	-	✓	-	-

At the bottom, it says 'Activate Windows' and 'Go to Settings to activate Windows.' The footer includes the user 'lunguvanesa22@stud.ase.ro', the session 'lunguv', and the license 'Oracle APEX 23.1'.

### --POPULAREA TABELEI CLIENTI

```

INSERT INTO CLIENTI (id_client, Nume, Prenume, CNP, Adresa, Numar_de_telefon, Email)
VALUES (1, 'Lungu', 'Vanesa-Denisa', 6040105170041, 'Str. Ghioceilor', 0752884130, 'denisalungu434');

```

```

INSERT INTO CLIENTI (id_client, Nume, Prenume, CNP, Adresa, Numar_de_telefon, Email)

```

```

VALUES (2, 'Istrate', 'Andreea', 8530162842134, 'Str Batranetii', 0752884131, 'istrateandreea');

```

```

UPDATE CLIENTI SET Adresa='Str. Batranetii' WHERE ID_CLIENT=2;

```

```
UPDATE CLIENTI SET Prenume='Andreea-Alexandra' WHERE ID_CLIENT=2;
```

```
INSERT INTO CLIENTI (id_client, Nume, Prenume, CNP, Adresa, Numar_de_telefon, Email)  
VALUES (3, 'Firan', 'Marian', 5926148294145, 'Str 18 Decembrie', 0752884132, 'firanmarijan');  
UPDATE CLIENTI SET Adresa='Str. 18 Decembrie' WHERE ID_CLIENT=3;
```

```
INSERT INTO CLIENTI (id_client, Nume, Prenume, CNP, Adresa, Numar_de_telefon, Email)  
VALUES(4, 'Fluturu', 'Andreea', 6925174284718, 'Str Frumoasa', 0752884133, 'fluturuandreea');  
UPDATE CLIENTI SET Adresa='Str. Frumoasa' WHERE ID_CLIENT=4;
```

```
INSERT INTO CLIENTI (id_client, Nume, Prenume, CNP, Adresa, Numar_de_telefon, Email)  
VALUES(5, 'Fluturu', 'Patrisia', 7291752956247, 'Str Frumoasa', 0728519274, 'fluturupatrisia');  
UPDATE CLIENTI SET Adresa='Str. Frumoasa' WHERE ID_CLIENT=5;
```

```
INSERT INTO CLIENTI (id_client, Nume, Prenume, CNP, Adresa, Numar_de_telefon, Email)  
VALUES(6, 'Fuica', 'Andreea', 5195274915284, 'Str. Marganeanului', 0751927539, 'fuicaandreea');
```

```
INSERT INTO CLIENTI (id_client, Nume, Prenume, CNP, Adresa, Numar_de_telefon, Email)  
VALUES(7, 'Fuica', 'Diana', 8192548164294, 'Str Frunzei', 0715294629, 'fuicadiana');  
UPDATE CLIENTI SET Adresa='Str. Frunzei' WHERE ID_CLIENT=7;
```

```
INSERT INTO CLIENTI (id_client, Nume, Prenume, CNP, Adresa, Numar_de_telefon, Email)  
VALUES(8, 'Tudor', 'Razvan-Constantin', 5927149265172, 'Str. Salciei', 0724678123, 'tudorrazvan');
```

```
SELECT * FROM CLIENTI  
ORDER BY ID_CLIENT;
```

```

150 UPDATE CLIENTI SET Adresa='Str. Frunzei' WHERE ID_CLIENT=7;
151
152 INSERT INTO CLIENTI (ID_CLIENT, NUME, PRENUME, CNP, ADRESA, NUMAR_DE_TELEFON, EMAIL)
153 VALUES(8, 'Tudor', 'Razvan-Constantin', 5927149265172, 'Str. Salciel', 0724678123, 'tudorrazvan');
154
155 SELECT * FROM CLIENTI
156 ORDER BY ID_CLIENT;
157
158 --POPULAREA TABELEI CONTURI
159 INSERT INTO CONTURI (ID_CONT, ID_CLIENT, TIP_CONT, SOLD, DATA_DESCHEIDERII)
160 VALUES(10, 1, 'Economii', 12000, to_date('12.01.2022', 'dd.mm.yyyy'));
161
162 INSERT INTO CONTURI (ID_CONT, ID_CLIENT, TIP_CONT, SOLD, DATA_DESCHEIDERII)
163 VALUES(20, 2, 'Bursa', 900, to_date('17.11.2023', 'dd.mm.yyyy'));
164
165 INSERT INTO CONTURI (ID_CONT, ID_CLIENT, TIP_CONT, SOLD, DATA_DESCHEIDERII)

```

Results

ID_CLIENT	NUME	PRENUME	CNP	ADRESA	NUMAR_DE_TELEFON	EMAIL
1	Lungu	Vanesa-Denisa	604010570041	Str. Ghicelor	752884130	denisalungu434
2	Istrate	Andreea-Alexandra	8530162842134	Str. Batranesti	752884131	istrateandreea
5	Firan	Marian	5926148294145	Str. Decembrie	752884132	firanmarijan
4	Fluturu	Andreea	692514284718	Str. Frumoasa	752884133	flutruandreea
5	Fluturu	Patricia	7291752956247	Str. Frumoasa	728519274	flutrupatricia
6	Fulca	Andreea	519527495284	Str. Margeanului	75294629	fulcandreea
7	Fulca	Diana	8192548164294	Str. Frunzei	715294629	Activating Windows Go to Settings to activate Windows.
8	Tudor	Razvan-Constantin	5927149265172	Str. Salciel	724678123	tudorrazvan

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### --POPULAREA TABELEI CONTURI

```

INSERT INTO CONTURI (id_cont, id_client, Tip_cont, Sold, Data_deschiderii)
VALUES(10, 1, 'Economii', 12000, to_date('12.01.2022', 'dd.mm.yyyy'));


```

```

INSERT INTO CONTURI (id_cont, id_client, Tip_cont, Sold, Data_deschiderii)
VALUES(20, 2, 'Bursa', 900, to_date('17.11.2023', 'dd.mm.yyyy'));


```

```

INSERT INTO CONTURI (id_cont, id_client, Tip_cont, Sold, Data_deschiderii)
VALUES(30, 3, 'Salariu', 8200, to_date('19.05.2018', 'dd.mm.yyyy'));


```

```

INSERT INTO CONTURI (id_cont, id_client, Tip_cont, Sold, Data_deschiderii)
VALUES(40, 4, 'Economii', 4800, to_date('13.07.2020', 'dd.mm.yyyy'));


```

```

INSERT INTO CONTURI (id_cont, id_client, Tip_cont, Sold, Data_deschiderii)
VALUES(50, 5, 'Bursa', 730, to_date('20.01.2018', 'dd.mm.yyyy'));


```

```

INSERT INTO CONTURI (id_cont, id_client, Tip_cont, Sold, Data_deschiderii)


```

```
VALUES(60, 6, 'Economii', 2800, to_date('12.12.2023', 'dd.mm.yyyy'));
```

```
INSERT INTO CONTURI (id_cont, id_client, Tip_cont, Sold, Data_deschiderii)
```

```
VALUES(70, 7, 'Economii', 5200, to_date('05.03.2021', 'dd.mm.yyyy'));
```

```
INSERT INTO CONTURI (id_cont, id_client, Tip_cont, Sold, Data_deschiderii)
```

```
VALUES(80, 8, 'Salariu', 7300, to_date('25.10.2017', 'dd.mm.yyyy'));
```

```
SELECT * FROM CONTURI
```

```
ORDER BY ID_CLIENT;
```

The screenshot shows the Oracle APEX SQL Workshop interface. The top navigation bar includes APEX, App Builder, SQL Workshop, Team Development, and Gallery. The right side shows the schema (WKSP\_LUNGUV) and a preview of the data. The main area contains the following SQL code:

```
177 INSERT INTO CONTURI (id_cont, id_client, Tip_cont, Sold, Data_deschiderii)
178 VALUES(70, 7, 'Economii', 5200, to_date('05.03.2021', 'dd.mm.yyyy'));
179
180 INSERT INTO CONTURI (id_cont, id_client, Tip_cont, Sold, Data_deschiderii)
181 VALUES(80, 8, 'Salariu', 7300, to_date('25.10.2017', 'dd.mm.yyyy'));
182
183 SELECT * FROM CONTURI
184 ORDER BY ID_CLIENT;
185
186 --POPULAREA TABLELEI IMPRUMUTURI
187 INSERT INTO IMPRUMUTURI (id_imprumut, id_client, Suma_imprumutata, Data_acordarii, Data_scadenta, Rata_dobanzii, Status)
188 VALUES (100, 1, 5000, to_date('14.02.2023', 'dd.mm.yyyy'), to_date('14.02.2043', 'dd.mm.yyyy'), 7.5, 'Activ');
189 UPDATE IMPRUMUTURI SET RATA_DOBANZII=7 WHERE ID_CLIENT=1;
190
191 INSERT INTO IMPRUMUTURI (id_imprumut, id_client, Suma_imprumutata, Data_acordarii, Data_scadenta, Rata_dobanzii, Status)
```

The results pane displays the following data:

ID_CONT	ID_CLIENT	TIPO_CONT	SOLD	DATA_DESCIDERII
10	1	Economii	12000	01/12/2022
20	2	Bursa	900	11/11/2023
30	3	Salariu	8200	05/19/2018
40	4	Economii	4800	07/15/2020
50	5	Bursa	750	01/20/2018
60	6	Economii	2800	12/02/2023
70	7	Economii	5200	03/05/2021
80	8	Salariu	7500	10/25/2017

### --POPULAREA TABELEI IMPRUMUTURI

```
INSERT INTO IMPRUMUTURI (id_imprumut, id_client, Suma_imprumutata, Data_acordarii,
Data_scadenta, Rata_dobanzii, Status)
```

```
VALUES (100, 1, 5000, to_date('14.02.2023', 'dd.mm.yyyy'), to_date('14.02.2043', 'dd.mm.yyyy'), 7.5,
'Activ');
```

```
UPDATE IMPRUMUTURI SET RATA_DOBANZII=7 WHERE ID_CLIENT=1;
```

```

INSERT INTO IMPRUMUTURI (id_imprumut, id_client, Suma_imprumutata, Data_acordarii,
Data_scadenta, Rata_dobanzii, Status)

VALUES (300, 3, 30000, to_date('09.11.2021', 'dd.mm.yyyy'), to_date('09.11.2051', 'dd.mm.yyyy'), 8,
'Activ');

UPDATE IMPRUMUTURI SET RATA_DOBANZII=NULL WHERE ID_CLIENT=3;

```

```

INSERT INTO IMPRUMUTURI (id_imprumut, id_client, Suma_imprumutata, Data_acordarii,
Data_scadenta, Rata_dobanzii, Status)

VALUES (800, 8, 24000, to_date('20.05.2020', 'dd.mm.yyyy'), to_date('20.05.2048', 'dd.mm.yyyy'), 7,
'Activ');

```

SELECT \* FROM IMPRUMUTURI

ORDER BY ID\_CLIENT;

ID_IMPRUMUT	ID_CLIENT	SUMA_IMPRUMUTATA	DATA_ACORDARII	DATA_SCADENTA	RATA_DOBANZII	STATUS
100	1	5000	02/14/2023	02/14/2045	5	Activ
300	3	30000	11/09/2021	11/09/2051	-	Activ
800	8	24000	05/20/2020	05/20/2048	7	Activ

#### --POPULAREA TABELEI TRANZACTII

```

INSERT INTO TRANZACTII (id_tranzactie, id_cont, Suma, Data_tranzactiei, Descriere)

VALUES(1,10, 20, to_date('12.12.2023', 'dd.mm.yyyy'), 'Cumparaturi');

```

```
INSERT INTO TRANZACTII (id_tranzactie, id_cont, Suma, Data_tranzactiei, Descriere)
VALUES(2,10, 500, to_date('11.12.2023', 'dd.mm.yyyy'), 'Comanda online');
```

```
INSERT INTO TRANZACTII (id_tranzactie, id_cont, Suma, Data_tranzactiei, Descriere)
VALUES(3,10, 150, to_date('12.12.2023', 'dd.mm.yyyy'), 'Plata factura');
```

```
INSERT INTO TRANZACTII (id_tranzactie, id_cont, Suma, Data_tranzactiei, Descriere)
VALUES(4,30, 1500, to_date('20.11.2023', 'dd.mm.yyyy'), 'Chirie');
```

```
INSERT INTO TRANZACTII (id_tranzactie, id_cont, Suma, Data_tranzactiei, Descriere)
VALUES(5,30, 2000, to_date('01.12.2023', 'dd.mm.yyyy'), 'Rata credit');
```

```
INSERT INTO TRANZACTII (id_tranzactie, id_cont, Suma, Data_tranzactiei, Descriere)
VALUES(6,50, 300, to_date('08.12.2023', 'dd.mm.yyyy'), 'Transfer bancar');
```

```
INSERT INTO TRANZACTII (id_tranzactie, id_cont, Suma, Data_tranzactiei, Descriere)
VALUES(7,80, 1000, to_date('04.12.2023', 'dd.mm.yyyy'), 'Chirie');
```

```
INSERT INTO TRANZACTII (id_tranzactie, id_cont, Suma, Data_tranzactiei, Descriere)
VALUES(8,80, 500, to_date('15.05.2020', 'dd.mm.yyyy'), 'Transfer bancar');
```

```
INSERT INTO TRANZACTII (id_tranzactie, id_cont, Suma, Data_tranzactiei, Descriere)
VALUES(9,60, 86, to_date('12.12.2023', 'dd.mm.yyyy'), 'Cumparaturi');
```

```
INSERT INTO TRANZACTII (id_tranzactie, id_cont, Suma, Data_tranzactiei, Descriere)
VALUES(10,20, 300, to_date('10.10.2023', 'dd.mm.yyyy'), 'Facturi');
UPDATE TRANZACTII SET DESCRIERE='Plata factura' WHERE ID_TRANZACTIE=10;
```

```
INSERT INTO TRANZACTII (id_tranzactie, id_cont, Suma, Data_tranzactiei, Descriere)
```

```
VALUES(11,70, 330, to_date('05.06.2023', 'dd.mm.yyyy'), 'Comanda online');
```

```
SELECT * FROM TRANZACTII
```

```
ORDER BY ID_TRANZACTIE;
```

The screenshot shows the Oracle SQL Workshop interface. At the top, there are tabs for APEX, App Builder, SQL Workshop (selected), Team Development, and Gallery. Below the tabs, a search bar and a schema dropdown set to 'WKSP\_LUNGUV' are visible. The main area is titled 'SQL Commands' with a 'Language' dropdown set to 'SQL'. The 'Rows' dropdown is set to 10, and there are buttons for 'Clear Command' and 'Find Tables'. The code area contains several SQL statements, including INSERTs into the TRANZACTII table and an UPDATE statement. The results section displays the data from the TRANZACTII table, which includes columns: ID\_TRANZACTIE, ID\_CONT, SUMA, DATA\_TRANZACTIEI, and DESCRIERE. The data shows various transactions such as purchases, payments, and transfers. The bottom right corner of the results grid indicates 'Oracle APEx 23.2.1'.

ID_TRANZACTIE	ID_CONT	SUMA	DATA_TRANZACTIEI	DESCRIERE
1	10	20	12/12/2023	Cumparaturi
2	10	500	12/11/2023	Comanda online
3	10	150	12/12/2023	Plata factura
4	30	1500	11/20/2023	Chirie
5	30	2000	12/01/2023	Rata credit
6	50	300	12/08/2023	Transfer bancar
7	80	1000	12/04/2023	Chirie
8	80	500	05/15/2020	Transfer bancar

### --POPULAREA TABELEI ORASE

```
INSERT INTO ORASE (id_oras, nume_oras)
```

```
VALUES (1, 'Bucuresti');
```

```
INSERT INTO ORASE (id_oras, nume_oras)
```

```
VALUES (2, 'Galati');
```

```
INSERT INTO ORASE (id_oras, nume_oras)
```

```
VALUES (3, 'Craiova');
```

```
SELECT * FROM ORASE
```

```
ORDER BY ID_ORAS;
```

The screenshot shows the Oracle APEX SQL Workshop interface. The schema is set to WKSP\_LUNGUV. The code editor contains the following SQL script:

```

246 VALUES (2, 'Galati');
247 INSERT INTO ORASE (id_oras, nume_oras)
248 VALUES (3, 'Craiova');
249
250 SELECT * FROM ORASE
251 ORDER BY ID_ORAS;
252
253
254 --POPULAREA TABELEL DEPARTAMENTE
255 INSERT INTO DEPARTAMENTE(id_departament, id_oras, nume_departament)
256 VALUES (110, 1, 'FINANTE');
257
258 INSERT INTO DEPARTAMENTE(id_departament, id_oras, nume_departament)
259 VALUES (120, 1, 'MARKETING');
260
261 INSERT INTO DEPARTAMENTE(id_departament, id_oras, nume_departament)

```

The results table shows the populated data:

ID_ORAS	NUME_ORAS
1	Bucuresti
2	Galati
3	Craiova

3 rows returned in 0.02 seconds

Activate Windows  
Go to Settings to activate Windows.

### --POPULAREA TABELEI DEPARTAMENTE

```
INSERT INTO DEPARTAMENTE(id_departament, id_oras, nume_departament)
VALUES (110, 1, 'FINANTE');
```

```
INSERT INTO DEPARTAMENTE(id_departament, id_oras, nume_departament)
VALUES (120, 1, 'MARKETING');
```

```
INSERT INTO DEPARTAMENTE(id_departament, id_oras, nume_departament)
VALUES (130, 1, 'IT');
```

```
INSERT INTO DEPARTAMENTE(id_departament, id_oras, nume_departament)
VALUES (140, 1, 'RESURSE UMANE');
```

```
INSERT INTO DEPARTAMENTE(id_departament, id_oras, nume_departament)
VALUES (210, 2, 'FINANTE');
```

```
INSERT INTO DEPARTAMENTE(id_departament, id_oras, nume_departament)
```

```
VALUES (220, 2, 'MARKETING');
```

```
INSERT INTO DEPARTAMENTE(id_departament, id_oras, nume_departament)  
VALUES (230, 2, 'IT');
```

```
INSERT INTO DEPARTAMENTE(id_departament, id_oras, nume_departament)  
VALUES (240, 2, 'RESURSE UMANE');
```

```
INSERT INTO DEPARTAMENTE(id_departament, id_oras, nume_departament)  
VALUES (310, 3, 'FINANTE');
```

```
INSERT INTO DEPARTAMENTE(id_departament, id_oras, nume_departament)  
VALUES (320, 3, 'MARKETING');
```

```
INSERT INTO DEPARTAMENTE(id_departament, id_oras, nume_departament)  
VALUES (330, 3, 'IT');
```

```
INSERT INTO DEPARTAMENTE(id_departament, id_oras, nume_departament)  
VALUES (340, 3, 'RESURSE UMANE');
```

```
SELECT * FROM DEPARTAMENTE  
ORDER BY ID_DEPARTAMENT;
```

```

282 INSERT INTO DEPARTAMENTE(id_departament, id_oras, nume_departament)
283 VALUES (328, 3, 'MARKETING');
284
285 INSERT INTO DEPARTAMENTE(id_departament, id_oras, nume_departament)
286 VALUES (338, 3, 'IT');
287
288 INSERT INTO DEPARTAMENTE(id_departament, id_oras, nume_departament)
289 VALUES (348, 3, 'RESURSE UMANE');
290
291 SELECT * FROM DEPARTAMENTE
292 ORDER BY ID_DEPARTAMENT;
293
294 --POPULAREA TABELULUI ANGAJATI
295 INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Salariu, Data_angajarii)
296 VALUES (1, 110, 100, 'Lungu', 'Dragos', 8000, to_date('11.02.2020', 'dd.mm.yyyy'));

```

ID_DEPARTAMENT	ID_ORAS	NUME_DEPARTAMENT
110	1	FINANTE
120	1	MARKETING
130	1	IT
140	1	RESURSE UMANE
210	2	FINANTE
220	2	MARKETING
230	2	IT
240	2	RESURSE UMANE

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Activate Windows  
Go to Settings to activate Windows.

Oracle APEX 23.2.0

### --POPULAREA TABELEI ANGAJATI

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Salariu, Data_angajarii)
```

```
VALUES (1, 110, 100, 'Lungu', 'Dragos', 8000, to_date('11.02.2020', 'dd.mm.yyyy'));
```

```
UPDATE ANGAJATI SET VARSTA=24 WHERE ID_ANGAJAT=1;
```

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Salariu, Data_angajarii)
```

```
VALUES (100, 110, NULL, 'Popescu', 'Ana', 7000, to_date('12.02.2018', 'dd.mm.yyyy'));
```

```
UPDATE ANGAJATI SET VARSTA=40 WHERE ID_ANGAJAT=100;
```

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Varsta, Salariu, Data_angajarii)
```

```
VALUES(2, 120, 100, 'Ionescu', 'Mihai', 35, 9000, to_date('12.02.2018', 'dd.mm.yyyy'));
```

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Varsta, Salariu, Data_angajarii)
```

```
VALUES(3, 130, 1, 'Popa', 'Ioana', 40, 7500, to_date('13.02.2010', 'dd.mm.yyyy'));
```

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Varsta, Salariu,  
Data_angajarii)
```

```
VALUES(4, 140, 1, 'Radu', 'Elena', 41, 8200, to_date('14.02.2015', 'dd.mm.yyyy'));
```

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Varsta, Salariu,  
Data_angajarii)
```

```
VALUES(5, 210, 3, 'Dumitru', 'Andrei', 40, 8500, to_date('15.02.2011', 'dd.mm.yyyy'));
```

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Varsta, Salariu,  
Data_angajarii)
```

```
VALUES(6, 220, 100, 'Stanescu', 'Maria', 35, 7800, to_date('16.02.2011', 'dd.mm.yyyy'));
```

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Varsta, Salariu,  
Data_angajarii)
```

```
VALUES(7, 230, 2, 'Moldovan', 'Cristina', 32, 9200, to_date('17.02.2013', 'dd.mm.yyyy'));
```

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Varsta, Salariu,  
Data_angajarii)
```

```
VALUES(8, 240, 100, 'Dinu', 'Alexandru', 34, 8700, to_date('18.02.2014', 'dd.mm.yyyy'));
```

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Varsta, Salariu,  
Data_angajarii)
```

```
VALUES(9, 310, 5, 'Gheorghiu', 'Laura', 33, 8000, to_date('19.02.2015', 'dd.mm.yyyy'));
```

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Varsta, Salariu,  
Data_angajarii)
```

```
VALUES(10, 320, 100, 'Antonescu', 'Robert', 25, 9300, to_date('20.02.2020', 'dd.mm.yyyy'));
```

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Varsta, Salariu,  
Data_angajarii)
```

```
VALUES(11, 330, 5, 'Mihai', 'Andreea', 23, 7600, to_date('21.02.2022', 'dd.mm.yyyy'));
```

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Varsta, Salariu,  
Data_angajarii)
```

```
VALUES(12, 340, 2, 'Georgescu', 'Alex', 21, 8800, to_date('22.02.2023', 'dd.mm.yyyy'));
```

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Varsta, Salariu,  
Data_angajarii)
```

```
VALUES(13, 110, 4, 'Florescu', 'Diana', 28, 9200, to_date('23.02.2018', 'dd.mm.yyyy'));
```

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Varsta, Salariu,  
Data_angajarii)
```

```
VALUES(14, 120, 100, 'Dobre', 'Gabriel', 29, 7900, to_date('24.02.2017', 'dd.mm.yyyy'));
```

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Varsta, Salariu,  
Data_angajarii)
```

```
VALUES(15, 130, 12, 'Stanciu', 'Elena', 38, 8700, to_date('25.02.2012', 'dd.mm.yyyy'));
```

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Varsta, Salariu,  
Data_angajarii)
```

```
VALUES(16, 140, 100, 'Ilie', 'Ana-Maria', 45, 9400, to_date('26.02.2010', 'dd.mm.yyyy'));
```

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Varsta, Salariu,  
Data_angajarii)
```

```
VALUES(17, 210, 1, 'Balan', 'Ionut', 42, 8100, to_date('27.02.2015', 'dd.mm.yyyy'));
```

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Varsta, Salariu,  
Data_angajarii)
```

```
VALUES(18, 220, 2, 'Cristea', 'Teodora', 29, 8700, to_date('28.02.2018', 'dd.mm.yyyy'));
```

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Varsta, Salariu,  
Data_angajarii)
```

```
VALUES(19, 230, 5, 'Serban', 'Raluca', 36, 8000, to_date('29.02.2016', 'dd.mm.yyyy'));
```

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Varsta, Salariu,  
Data_angajarii)
```

```
VALUES(20, 240, 12, 'Anton', 'Adrian', 30, 9100, to_date('01.03.2016', 'dd.mm.yyyy'));
```

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Varsta, Salariu,  
Data_angajarii)
```

```
VALUES(21, 310, 100, 'Tudor', 'Madalina', 49, 7800, to_date('02.03.2013', 'dd.mm.yyyy'));
```

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Varsta, Salariu,  
Data_angajarii)
```

```
VALUES(22, 320, 15, 'Costin', 'Sorin', 50, 9300, to_date('03.03.2012', 'dd.mm.yyyy'));
```

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Varsta, Salariu,  
Data_angajarii)
```

```
VALUES(23, 330, 12, 'Gavrila', 'Catalina', 55, 8600, to_date('04.03.2020', 'dd.mm.yyyy'));
```

```
INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Varsta, Salariu,  
Data_angajarii)
```

```
VALUES(24, 340, 1, 'Mocanu', 'Alina', 20, 8900, to_date('05.03.2023', 'dd.mm.yyyy'));
```

```
SELECT * FROM ANGAJATI
```

```
ORDER BY ID_ANGAJAT;
```

The screenshot shows the Oracle APEX SQL Workshop interface. The top navigation bar includes links for APEX, App Builder, SQL Workshop, Team Development, and Gallery. The SQL Workshop tab is selected. The schema dropdown is set to 'WKSP\_LUNGUV'. The main area displays two SQL scripts:

```

369 INSERT INTO ANGAJATI (id_angajat, id_departament, id_manager, Nume, Prenume, Varsta, Salariu, Data_angajarii)
370 VALUES(24, 340, 1, 'Mocanu', 'Alina', 28, 8900, to_date('05.03.2023', 'dd.mm.yyyy'));
371
372 SELECT * FROM ANGAJATI
373 ORDER BY ID_ANGAJAT;
374
375 --POPULAREA TABELELEI SUCURSALE
376 INSERT INTO SUCURSALE (id_sucursala, id_oras, Nume_sucursala)
377 VALUES(11, 'BT CENTRU');
378 UPDATE SUCURSALE SET NUME_SUCURSALA='BT UNIRII' WHERE ID_SUCURSALA=11;
379 UPDATE SUCURSALE SET ADRESA='BLD UNIRII 25' WHERE ID_SUCURSALA=11;
380
381 INSERT INTO SUCURSALE (id_sucursala, id_oras, Nume_sucursala)
382 VALUES(12,1,'BT UNIVERSITATE');
383 UPDATE SUCURSALE SET ADRESA='BLD REGINA ELISABETA 16' WHERE ID_SUCURSALA=12;
384

```

The results pane shows the data for the ANGAJATI table:

ID_ANGAJAT	ID_DEPARTAMENT	ID_MANAGER	NUME	PRENUME	SALARIU	DATA_ANGAJARII	VARSTA
1	110	100	Lungu	Dragos	8000	02/11/2020	24
2	120	100	Ionescu	Mihai	9000	02/12/2018	35
3	130	1	Popa	Ioana	7500	02/15/2010	40
4	140	1	Radu	Elena	8200	02/14/2015	41
5	210	3	Dumitru	Andrei	8500	02/15/2011	40
6	220	100	Stanescu	Maria	7800	02/16/2011	35
7	230	2	Moldovan	Cristina	9200	02/17/2013	32
8	240	100	Dinu	Alexandru	8700	02/18/2014	34

### --POPULAREA TABELEI SUCURSALE

```

INSERT INTO SUCURSALE (id_sucursala, id_oras, Nume_sucursala)
VALUES(11,1,'BT CENTRU');

UPDATE SUCURSALE SET NUME_SUCURSALA='BT UNIRII' WHERE ID_SUCURSALA=11;

UPDATE SUCURSALE SET ADRESA='BLD UNIRII 25' WHERE ID_SUCURSALA=11;

```

```

INSERT INTO SUCURSALE (id_sucursala, id_oras, Nume_sucursala)
VALUES(12,1,'BT UNIVERSITATE');

UPDATE SUCURSALE SET ADRESA='BLD REGINA ELISABETA 16' WHERE ID_SUCURSALA=12;

```

```

INSERT INTO SUCURSALE (id_sucursala, id_oras, Nume_sucursala)
VALUES(13,1,'BT RAHOVA');

UPDATE SUCURSALE SET ADRESA='SOS ALEXANDRIEI 16' WHERE ID_SUCURSALA=13;

```

```

INSERT INTO SUCURSALE (id_sucursala, id_oras, Nume_sucursala)
VALUES(14,2,'BT BRAILEI');

UPDATE SUCURSALE SET ADRESA='STRADA BRAILEI 152' WHERE ID_SUCURSALA=14;

```

```
INSERT INTO SUCURSALE (id_sucursal, id_oras, Nume_sucursal)
VALUES(15,2,'BT MICRO 18');

UPDATE SUCURSALE SET ADRESA='STRADA BRAILEI 192' WHERE ID_SUCURSALA=15;
```

```
INSERT INTO SUCURSALE (id_sucursal, id_oras, Nume_sucursal)
VALUES(16,2,'BT MAZEPA');

UPDATE SUCURSALE SET ADRESA='STRADA BRAILEI 132' WHERE ID_SUCURSALA=16;
```

```
INSERT INTO SUCURSALE (id_sucursal, id_oras, Nume_sucursal)
VALUES(17,2,'BT MICRO 14');

UPDATE SUCURSALE SET ADRESA='STRADA BRAILEI 200' WHERE ID_SUCURSALA=17;
```

```
INSERT INTO SUCURSALE (id_sucursal, id_oras, Nume_sucursal)
VALUES(18,3,'BT ELECTROPTR');

UPDATE SUCURSALE SET ADRESA='STR. IMPARATUL TRAIAN 219' WHERE ID_SUCURSALA=18;
```

```
INSERT INTO SUCURSALE (id_sucursal, id_oras, Nume_sucursal)
VALUES(19,3,'BT CRAIOVITEI');

UPDATE SUCURSALE SET ADRESA='STRADA TUFANELE 1' WHERE ID_SUCURSALA=19;
```

```
INSERT INTO SUCURSALE (id_sucursal, id_oras, Nume_sucursal)
VALUES(20,3,'BT VALEA ROSIE');

UPDATE SUCURSALE SET NUME_SUCURSALA='BT VALEA FETII' WHERE ID_SUCURSALA=20;

UPDATE SUCURSALE SET ADRESA='STRADA CARACAL 95' WHERE ID_SUCURSALA=20;

DELETE FROM SUCURSALE WHERE ADRESA='STRADA BRAILEI 152';
```

```
SELECT * FROM SUCURSALE
ORDER BY ID_SUCURSALA;
```

```

407 UPDATE SUCURSALA SET ADRESA='STR. IMPARATUL TRAIAN 219' WHERE ID_SUCURSALA=16;
408 INSERT INTO SUCURSALA (id_sucursal, id_oras, Nume_sucursal)
409 VALUES(19,3,'BT CRAIOVITEI');
410 UPDATE SUCURSALA SET ADRESA='STRADA TUFANELE 1' WHERE ID_SUCURSALA=19;
411 UPDATE SUCURSALA SET ADRESA='STRADA CARACAL 95' WHERE ID_SUCURSALA=20;
412 DELETE FROM SUCURSALA WHERE ADRESA='STRADA BRAILEI 152';
413 INSERT INTO SUCURSALA (id_sucursal, id_oras, Nume_sucursal)
414 VALUES(20,3,'BT VALEA ROSIE');
415 UPDATE SUCURSALA SET NUME_SUCURSALA='BT VALEA FETII' WHERE ID_SUCURSALA=20;
416 UPDATE SUCURSALA SET ADRESA='STRADA BRAILEI 152' WHERE ID_SUCURSALA=20;
417
418
419
420
421
422

```

**Results**

ID_SUCURSALA	ID_ORAS	NUME_SUCURSALA	ADRESA
11	1	BT UNIRII	BLD UNIRII 25
12	1	BT UNIVERSITATE	BLD REGINA ELISABETA 16
13	1	BT RAHOVA	SOS ALEXANDRIEI 16
15	2	BT MICRO 18	STRADA BRAILEI 192
16	2	BT MAZEPA	STRADA BRAILEI 192
17	2	BT MICRO 14	STRADA BRAILEI 200
18	3	BT ELECTROPTR	STR. IMPARATUL TRAIAN 219
19	3	BT CRAIOVITEI	STRADA TUFANELE 1

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Oracle APEX 23.2.0

## INTEROGARI PENTRU TABELELE CREATE:

- 1) Creati un index pentru data angajarii si pe baza acestuia, afisati angajatii si data angajarii pentru cei angajati in anul 2020.

CREATE INDEX anul\_angajarii\_idx

ON Angajati (TO\_CHAR(data\_angajarii, 'yyyy'));

SELECT id\_angajat, nume, prenume, data\_angajarii

FROM Angajati

WHERE TO\_CHAR(data\_angajarii, 'yyyy')='2020';

```

A21 --Creati un index pentru data angajarii si pe baza acestuia, afisati angajatii si data angajarii pentru cei angajati in anul 2020.
A22 CREATE INDEX anu_angajarii_idx
A23 ON Angajati (TO_CHAR(data_angajarii, 'yyyy'));
A24
A25 SELECT id_angajat, nume, prenume, data_angajarii
A26 FROM Angajati
A27 WHERE TO_CHAR(data_angajarii, 'yyyy')='2020';
A28
A29

```

ID_ANGAJAT	NUME	PRENUME	DATA_ANGAJARI
10	Antonescu	Robert	02/20/2020
1	Lungu	Dragos	02/1/2020
100	Popescu	Ana	02/12/2020
23	Gavrilă	Catalina	05/04/2020

4 rows returned in 0.01 seconds [Download](#)

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Oracle APEX 23.2.1

- 2) **Creati un sinonim pentru tabela Angajati si pe baza acestuia, afisati numele, prenumele si id-ul de angajat al subordonatilor angajatului cu id-ul 12, impreuna cu nivelul de subordonare.**

CREATE SYNONYM ang

FOR Angajati;

```

SELECT id_angajat, id_manager, nume, prenume, LEVEL, SYS_CONNECT_BY_PATH(nume, '/')
FROM ang
CONNECT BY PRIOR id_angajat=id_manager
START WITH id_angajat=12;

```

APEX App Builder SQL Workshop Team Development Gallery

Search Schema WKSP\_LUNGUV

SQL Commands Language SQL Rows 10 Clear Command Find Tables Save Run

```
--Creati un sinonim pentru tabela Angajati si pe baza acestuia, afisati numele, prenumele si id-ul de angajat al subordonatilor angajatului cu id-ul 12, impreuna cu nivelul de subordoneare.
CREATE SYNONYM ang
FOR Angajati;
SELECT id_angajat, id_manager, nume, prenume, LEVEL, SYS_CONNECT_BY_PATH(nume, '/') 
FROM ang
CONNECT BY PRIOR id_angajat=id_manager
START WITH id_angajat=12;
```

**Results**

ID_ANGAJAT	ID_MANAGER	NUME	PRENUME	LEVEL	SYS_CONNECT_BY_PATH(UME,'/')
12	2	Georgescu	Alex	1	/Georgescu
15	12	Stanciu	Elena	2	/Georgescu/Stanciu
22	15	Costin	Sorin	3	/Georgescu/Stanciu/Costin
20	12	Anton	Adrian	2	/Georgescu/Anton
23	12	Gavrilă	Catalina	2	/Georgescu/Gavrilă

5 rows returned in 0.02 seconds Download

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Oracle APEX 23.3

### 3) Afisati numele, prenumele si salariul managerului principal.

SELECT nume, prenume, salariu

FROM ang

WHERE id\_manager IS NULL;

APEX App Builder SQL Workshop Team Development Gallery

Search Schema WKSP\_LUNGUV

SQL Commands Language SQL Rows 10 Clear Command Find Tables Save Run

```
--Afisati numele, prenumele si salariul managerului principal.
SELECT id_angajat, id_manager, nume, prenume, LEVEL, SYS_CONNECT_BY_PATH(nume, '/')
FROM ang
CONNECT BY PRIOR id_angajat=id_manager
START WITH id_angajat=12;
--Afisati numele, prenumele si salariul managerului principal.
SELECT nume, prenume, salariu
FROM ang
WHERE id_manager IS NULL;
```

**Results**

NUME	PRENUME	SALARIU
Popescu	Ana	7000

1 rows returned in 0.00 seconds Download

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Oracle APEX 23.3

- 4) Creati o tabela virtuala pe baza tablei Clienti fara a i se putea face modificar si afisati continutul acesteia.

```
CREATE VIEW Clienti_virtual
```

```
AS SELECT * FROM Clienti
```

```
WITH READ ONLY;
```

```
SELECT * FROM Clienti_virtual
```

```
ORDER BY id_client;
```

The screenshot shows the Oracle APEX SQL Workshop interface. In the top navigation bar, 'SQL Workshop' is selected. The main area contains the following SQL code:

```

444  FROM ang
445  WHERE id_manager IS NULL;
446
447  --Creati o tabela virtuala pe baza tablei Clienti fara a i se putea face modificar si afisati continutul acestela.
448
449  CREATE VIEW Clienti_virtual
450  AS SELECT * FROM Clienti
451  WITH READ ONLY;
452
453  SELECT * FROM Clienti_virtual
454  ORDER BY id_client;

```

Below the code, the 'Results' tab is selected. It displays the results of the query in a table format:

ID_CLIENT	NUME	PRENUME	CNP	ADRESA	NUMAR_DE_TELEFON	EMAIL
1	Lungu	Vanesa-Denisa	604010570041	Str. Ghicelor	752884130	denisalungu434
2	Istrate	Andreea-Alexandra	8530162842154	Str. Bârnavelii	752884131	istrateandreea
3	Firaru	Marián	5926148294145	Str. 18 Decembrie	752884132	firamarian
4	Firaru	Andrea	692374284718	Str. Frumoasa	752884133	fluturusandrea
5	Firaru	Patricia	7291752956247	Str. Frumoasa	728519274	Activate Windows Go to Settings to activate Windows. firarupatricia
A	Cires	Andreea	5105771015784	Str. Mărășești	752884130	firarupatricia

At the bottom of the results table, there is a note: "Copyright © 1999, 2023, Oracle and/or its affiliates." and the text "Oracle APEX 23.1".

- 5) Afisati anagajatii ai caror salariu depaseste suma de 6000lei, dar si cei care au cel mult un manager, fara cei care au fost angajati in anul 2018.

```
SELECT id_angajat, id_manager, nume, prenume, salariu, data_angajarii, COUNT(id_manager)
```

```
FROM Angajati
```

```
WHERE salariu>6000
```

```
GROUP BY id_angajat, id_manager, nume, prenume, salariu, data_angajarii
```

```
INTERSECT
```

```
SELECT id_angajat, id_manager, nume, prenume, salariu, data_angajarii, COUNT(id_manager)
```

FROM Angajati

GROUP BY id\_angajat, id\_manager, nume, prenume, salariu, data\_angajarii

HAVING COUNT(id\_manager)<2

MINUS

SELECT id\_angajat, id\_manager, nume, prenume, salariu, data\_angajarii, COUNT(id\_manager)

FROM Angajati

WHERE EXTRACT (YEAR FROM data\_angajarii)=2018

GROUP BY id\_angajat, id\_manager, nume, prenume, salariu, data\_angajarii;

```
456 --Afisati angajatii ai caror salariu depaseste suma de 6000lei, cel care au cel mult un manager, fara cel care au fost angajati in anul 2018.
457
458 SELECT id_angajat, id_manager, nume, prenume, salariu, data_angajarii, COUNT(id_manager)
459 FROM Angajati
460 WHERE salariu>6000
461 GROUP BY id_angajat, id_manager, nume, prenume, salariu, data_angajarii
462 INTERSECT
463 SELECT id_angajat, id_manager, nume, prenume, salariu, data_angajarii, COUNT(id_manager)
464 FROM Angajati
465 GROUP BY id_angajat, id_manager, nume, prenume, salariu, data_angajarii
466 HAVING COUNT(id_manager)<2
467 MINUS
468 SELECT id_angajat, id_manager, nume, prenume, salariu, data_angajarii, COUNT(id_manager)
469 FROM Angajati
470 WHERE EXTRACT (YEAR FROM data_angajarii)=2018
471 GROUP BY id_angajat, id_manager, nume, prenume, salariu, data_angajarii]
```

ID_ANGAJAT	ID_MANAGER	NUME	PRENUME	SALARIU	DATA_ANGAJARII	COUNT(ID_MANAGER)
1	100	Lungu	Dragos	8000	02/11/2020	1
3	1	Popa	Ioana	7500	02/15/2010	1
4	1	Radu	Elena	8200	02/14/2015	1
5	3	Dumitru	Andrei	8500	02/15/2011	1
6	100	Stanescu	Maria	7800	02/16/2011	1
7	7	Moldovan	Cristina	9200	02/17/2015	1

6) Afisati clientii bancii care au cerut un imprumut, impreuna cu id-ul de cont al fiecaruia si suma imprumutata, iar pentru fiecare, stabiliti tipul imprumutului, pe baza informatiilor urmatoare:

--Daca suma imprumutata este mai mica de 10000 lei, atunci creditul va fi pe termen scurt

--Daca suma imprumutata este intre 20000 si 80000 lei, atunci creditul va fi pe termen lung

--Daca suma imprumutata este mai mare de 80000 lei, atunci creditul nu exista

SELECT c.id\_client, id\_cont, id\_imprumut, nume, prenume, suma\_imprumutata,

CASE

WHEN suma\_imprumutata<10000 THEN 'Credit pe termen scurt'

WHEN suma\_imprumutata BETWEEN 20000 AND 80000 THEN 'Credit pe termen lung'

ELSE 'Nu exista un credit' END Tip\_imprumut

FROM Conturi c, Imprumuturi i, Clienti cl

WHERE c.id\_client=i.id\_client AND c.id\_client=cl.id\_client;

```
473 --afisati clientii bancii care au cerut un imprumut, impreuna cu id-ul de cont al fiecarui si suma imprumutata, iar pentru fiecare, stabiliti tipul imprumutului, pe baza informatiilor urmatoare:  
474 --Daca suma imprumutata este mai mica de 10000 lei, atunci creditul va fi pe termen scurt  
475 --Daca suma imprumutata este intre 20000 si 80000 lei, atunci creditul va fi pe termen lung  
476 --Daca suma imprumutata este mai mare de 80000 lei, atunci creditul nu exista  
477  
478 SELECT c.id_client,id_cont, id_imprumut, nume, prenume, suma_imprumutata,  
479 CASE  
480 WHEN suma_imprumutata<10000 THEN 'Credit pe termen scurt'  
481 WHEN suma_imprumutata BETWEEN 20000 AND 80000 THEN 'Credit pe termen lung'  
482 ELSE 'Nu exista un credit' END Tip_imprumut  
483 FROM Conturi c, Imprumuturi i, Clienti cl  
484 WHERE c.id_client=i.id_client AND c.id_client=cl.id_client;  
485
```

ID_CLIENT	ID_CONT	ID_IMPRUMUT	NUME	PRENUME	SUMA_IMPRUMUTATA	TIP_IMPRUMUT
8	80	800	Tudor	Razvan-Constantin	24000	Credit pe termen lung
1	10	100	Lungu	Vanesa-Denisa	5000	Credit pe termen scurt
3	30	300	Firan	Marian	30000	Credit pe termen lung

- 7) Afisati clientii bancii care au cerut un imprumut, impreuna cu id-ul de cont si suma imprumutata, iar pentru fiecare imprumut, stabiliti suma care trebuie rambursata.

SELECT c.id\_client, id\_cont, id\_imprumut, nume, prenume, suma\_imprumutata,  
(suma\_imprumutata+suma\_imprumutata\*NVL(rata\_dobanzii,0)) suma\_rambursata

FROM Conturi c, Imprumuturi i, Clienti cl

WHERE c.id\_client=i.id\_client AND c.id\_client=cl.id\_client;

The screenshot shows the Oracle APEX SQL Workshop interface. The query is:

```

485 --Afisati clientii bancii care au cerut un imprumut, impreuna cu id-ul de cont si suma imprumutata, iar pentru fiecare imprumut, stabiliti suma care trebuie rambursata;
486
487
488 SELECT c.id_client, id_cont, id_imprumut, nume, prenume, suma_imprumutata, (suma_imprumutata+suma_imprumutata*NVL(rata_dobanzii,0)) suma_rambursata
489 FROM Conturi c, Imprumuturi i, Clienti cl
490 WHERE c.id_client=i.id_client AND c.id_client=cl.id_client;

```

The results table shows the following data:

ID_CLIENT	ID_CONT	ID_IMPRUMUT	NUME	PRENUME	SUMA_IMPRUMUTATA	SUMA_RAMBURSATA
8	80	800	Tudor	Razvan-Constantin	24000	192000
1	10	100	Lungu	Vanesa-Denisa	5000	5000
3	30	300	Firan	Marian	30000	270000

3 rows returned in 0.00 seconds

**8) Afisati angajatii bancii, iar pentru fiecare, stabiliti statulul pe baza vechimii, astfel:**

**--Cei angajati de mai putin sau exact 5 ani sunt juniori**

**--Cei angajati de 6-10 ani sunt seniori**

**--Cei angajati de peste 10 ani sunt experti**

SELECT id\_angajat, nume, prenume, data\_angajarii,

CASE WHEN EXTRACT(YEAR FROM SYSDATE)-EXTRACT(YEAR FROM DATA\_ANGAJARII)<=5 THEN 'JUNIOR'

WHEN EXTRACT(YEAR FROM SYSDATE)-EXTRACT(YEAR FROM DATA\_ANGAJARII) BETWEEN 6 AND 10  
THEN 'SENIOR'

ELSE 'EXPERT' END statut

FROM Angajati;

```

APEX App Builder SQL Workshop Team Development Gallery
Search LV Lungu Vanesa-D...
Schema WKSP_LUNGUV

SQL Commands
Language SQL Rows 10 Clear Command Find Tables Save Run

490 WHERE c.id_client=i.id_client AND c.id_client=cl.id_client;
491
492 --Afisati angajatii bancii, iar pentru fiecare, stabiliti statulul pe baza vechimii, astfel:
493 --Cel angajati de mai putin sau exact 5 ani sunt juniori
494 --Cel angajati de 6-10 ani sunt seniori
495 --Cel angajati de peste 10 ani sunt experti
496
497 SELECT id_angajat, nume, prenume, data_angajarii,
498 CASE WHEN EXTRACT(YEAR FROM SYSDATE)-EXTRACT(YEAR FROM DATA_ANGAJARII)<=5 THEN 'JUNIOR'
499 WHEN EXTRACT(YEAR FROM SYSDATE)-EXTRACT(YEAR FROM DATA_ANGAJARII) BETWEEN 6 AND 10 THEN 'SENIOR'
500 ELSE 'EXPERT' END statut
501 FROM Angajati;

```

Results Explain Describe Saved SQL History

ID_ANGAJAT	NUME	PRENUME	DATA_ANGAJARII	STATUT
22	Costin	Sorin	03/03/2012	EXPERT
1	Lungu	Dragos	02/11/2020	JUNIOR
3	Popa	Ioana	02/13/2010	EXPERT
100	Popescu	Ana	02/02/2020	JUNIOR
2	Ionescu	Mihai	02/02/2018	EXPERT

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### 9) Afisati tranzactiile clientilor si modificati descrierea fiecareia astfel:

--Daca suma tranzactiei este 2000 lei, vor fi folositi pentru chirie

--Daca suma tranzactiei este 500 lei, vor fi folositi pentru facturi

--Daca suma tranzactiei este 86 lei, vor fi folositi pentru un transfer bancar

UPDATE TRANZACTII

SET Descriere=DECODE(Suma, 2000, 'Chirie', 500, 'Plata factura', 86, 'Transfer bancar', Descriere);

SELECT id\_tranzactie, id\_cont, suma, data\_tranzactiei, descriere FROM Tranzactii;

APEX App Builder SQL Workshop Team Development Gallery

Search LV Lungs Vanesa-D... Langov

Schema WKSP\_LUNGUV

SQL Commands Language SQL Rows 10 Clear Command Find Tables Save Run

```

500     ELSE 'EXPERT' END statut
501  FROM Angajati;
502
503 --Afisati tranzactiile clientilor si modificati descrierea fiecarei astfel:
504 --Daca suma tranzactiei este 2000 lei, vor fi folositi pentru chirie
505 --Daca suma tranzactiei este 500 lei, vor fi folositi pentru facturi
506 --Daca suma tranzactiei este 86 lei, vor fi folositi pentru un transfer bancar
507
508 UPDATE TRANZACTII
509 SET Descriere=DECODE(Suma, 2000, 'Chirie', 500, 'Plata factura', 86, 'Transfer bancar', Descriere);
510
511 SELECT id_tranzactie, id_cont, suma, data_tranzactiei, descriere FROM Tranzactii;

```

Results Explain Describe Saved SQL History

ID_TRANZACTIE	ID_CONT	SUMA	DATA_TRANZACTIEI	DESCRIBE
1	10	20	12/12/2023	Cumparaturi
3	10	150	13/12/2023	Plata factura
9	60	86	12/12/2023	Transfer bancar
8	80	500	05/12/2020	Plata factura
2	10	500	02/11/2023	Plata factura Activate Windows Go to Settings to activate Windows.

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**10) Afisati clientii si conturile acestora si extrageti primele 3 litere din numele celor ale caror nume incep cu litera F**

```

SELECT c.id_client, id_cont, nume, prenume, SUBSTR(nume,1,3) Primele_3_litere
FROM Clienti cl, Conturi c
WHERE cl.id_client=c.id_client AND nume LIKE 'F%';

```

APEX App Builder SQL Workshop Team Development Gallery

Search LV Lungs Vanesa-D... Langov

Schema WKSP\_LUNGUV

SQL Commands Language SQL Rows 10 Clear Command Find Tables Save Run

```

500 UPDATE TRANZACTII
501 SET Descriere=DECODE(Suma, 2000, 'Chirie', 500, 'Plata factura', 86, 'Transfer bancar', Descriere);
502
503 SELECT id_tranzactie, id_cont, suma, data_tranzactiei, descriere FROM Tranzactii;
504
505 --Afisati clientii si conturile acestora si extrageti primele 3 litere din numele celor ale caror nume incep cu litera F
506
507 SELECT c.id_client, id_cont, nume, prenume, SUBSTR(nume,1,3) Primele_3_litere
508 FROM Clienti cl, Conturi c
509 WHERE cl.id_client=c.id_client AND nume LIKE 'F%';
510
511

```

Results Explain Describe Saved SQL History

ID_CLIENT	ID_CONT	NUME	PRENUME	PRIMELE_3_LITERE
5	50	Fluturu	Patricia	Fli
4	40	Fluturu	Andreea	Fli
3	30	Firan	Marian	Fir
7	70	Fulca	Diana	Fui
6	60	Fulca	Andreea	Fui Activate Windows Go to Settings to activate Windows.

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**11) Afisati angajatii bancii care nu au fost angajati in data de 15.02.2011 si 16.02.2011, suma totala a salariilor lor si media salariilor.**

```
SELECT id_angajat, nume, prenume, data_angajarii, salariu, SUM(salariu) OVER () suma_salariilor ,  
ROUND(AVG(salariu) OVER (), 1) media_salariilor
```

FROM angajati

WHERE TO\_DATE(data\_angajarii, 'MM.DD.YYYY') != TO\_DATE('02.15.2011', 'MM.DD.YYYY')

AND TO\_DATE(data\_angajarii, 'MM.DD.YYYY') != TO\_DATE('02.16.2011', 'MM.DD.YYYY')

GROUP BY id\_angajat, nume, prenume, data\_angajarii, salariu;

ORDER BY data\_angajarii;

The screenshot shows the Oracle APEX SQL Workshop interface. The SQL command window contains the query for selecting employees from the 'angajati' table who were not employed between February 15, 2011, and February 16, 2011. The results window displays the output, which includes columns for ID, Name, Surname, Employment Date, Salary, Total Salary, and Average Salary. The results show five employees: Popa Ioana, Ilie Ana-Maria, Stanciu Elena, Costin Sorin, and Moldovan Cristina, all with a salary of 195000 and an average salary of 8478.5.

ID_ANGAJAT	NUME	PRENUME	DATA_ANGAJARII	SALARIU	SUMA_SALARIILOR	MEDIA_SALARIILOR
3	Popa	Ioana	02/15/2010	7500	195000	8478.5
16	Ilie	Ana-Maria	02/26/2010	9400	195000	8478.5
15	Stanciu	Elena	02/25/2012	8700	195000	8478.5
22	Costin	Sorin	03/03/2012	9300	195000	8478.5
7	Moldovan	Cristina	02/17/2013	9200	195000	8478.5

**12) Clientul cu id-ul 6 si a inchis contul la banca, astfel, stergeti din baza de date clientului cu id-ul 6, impreuna cu contul acestuia (deschis la data de 12.12.2023) si imprumutul sau, doar daca a fost inregistrat si achitat.**

ALTER TABLE Conturi

DISABLE CONSTRAINT id\_client\_fk;

ALTER TABLE Imprumuturi

DISABLE CONSTRAINT fk\_id\_client;

ALTER TABLE Tranzactii

```
DISABLE CONSTRAINT id_cont_fk;
```

```
DELETE FROM Conturi WHERE data_deschiderii=TO_DATE('12.12.2023', 'DD.MM.YYYY');
```

```
SELECT * FROM Conturi
```

```
ORDER BY id_client;
```

```
DELETE FROM Clienti WHERE id_client=6;
```

```
SELECT * FROM Clienti
```

```
ORDER BY id_client;
```

```
DELETE FROM Tranzactii WHERE id_cont=60;
```

```
SELECT * FROM Tranzactii
```

```
ORDER BY id_cont;
```

```
ALTER TABLE Conturi
```

```
ENABLE CONSTRAINT id_client_fk;
```

```
ALTER TABLE Imprumuturi
```

```
ENABLE CONSTRAINT fk_id_client;
```

```
ALTER TABLE Tranzactii
```

```
ENABLE CONSTRAINT id_cont_fk;
```

APEX App Builder SQL Workshop Team Development Gallery

Search Schema WKSP\_LUNGUV

SQL Commands Language SQL Rows 10 Clear Command Find Tables Save Run

```

545 ALTER TABLE Conturi
546 DISABLE CONSTRAINT id_client_fk;
547 ALTER TABLE Imprumatur
548 DISABLE CONSTRAINT fk_id_client;
549 ALTER TABLE Tranzactii
550 DISABLE CONSTRAINT id_cont_fk;
551
552 DELETE FROM Conturi WHERE data_deschiderii=TO_DATE('12.12.2023', 'DD.MM.YYYY');
553 SELECT * FROM Conturi
554 ORDER BY id_client;
555
556 DELETE FROM Clienti WHERE id_client=6;
557 SELECT * FROM Clienti
558 ORDER BY id_client;
559
560 ALTER TABLE Conturi
561 ENABLE CONSTRAINT id_client_fk;
562 ALTER TABLE Imprumatur
563 ENABLE CONSTRAINT fk_id_client;
564 ALTER TABLE Tranzactii

```

Results Explain Describe Saved SQL History

ID_CONT	ID_CLIENT	TIP_CONT	SOLD	DATA_DESCIDERII
10	1	Economii	12000	01/12/2022
20	2	Bursa	900	11/12/2023
30	3	Salariu	8200	05/10/2018
40	4	Economii	4800	07/15/2020
50	5	Bursa	750	01/20/2018
70	7	Economii	5200	05/05/2021

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APEX App Builder SQL Workshop Team Development Gallery

Search Schema WKSP\_LUNGUV

SQL Commands Language SQL Rows 10 Clear Command Find Tables Save Run

```

545 ALTER TABLE Conturi
546 DISABLE CONSTRAINT id_client_fk;
547 ALTER TABLE Imprumatur
548 DISABLE CONSTRAINT fk_id_client;
549 ALTER TABLE Tranzactii
550 DISABLE CONSTRAINT id_cont_fk;
551
552 DELETE FROM Conturi WHERE data_deschiderii=TO_DATE('12.12.2023', 'DD.MM.YYYY');
553 SELECT * FROM Conturi
554 ORDER BY id_client;
555
556 DELETE FROM Clienti WHERE id_client=6;
557 SELECT * FROM Clienti
558 ORDER BY id_client;
559
560 ALTER TABLE Conturi
561 ENABLE CONSTRAINT id_client_fk;
562 ALTER TABLE Imprumatur
563 ENABLE CONSTRAINT fk_id_client;
564 ALTER TABLE Tranzactii

```

Results Explain Describe Saved SQL History

ID_CLIENT	NUME	PRENUME	CNP	ADRESA	NUMAR DE TELEFON	EMAIL
1	Lungu	Vanesa-Denisa	6040105170041	Str. Ghicelior	752884150	denisalungu434
2	Istrate	Andreea-Alexandra	8530162842134	Str. Batranetii	752884151	istrateandreea
3	Firan	Marian	5926148294145	Str. 18 Decembrie	752884152	firanmarijan
4	Fluturu	Andrea	692574284718	Str. Frumoasa	752884153	fluturuandrea
5	Fluturu	Patricia	7291752956247	Str. Frumoasa	728519274	fluturupatricia
7	Fuica	Diana	8192548164294	Str. Frunzel	715294629	fuicadiana

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```

552 DELETE FROM Conturi WHERE data_deschidere=TO_DATE('12.12.2023', 'DD.MM.YYYY');
553 SELECT * FROM Conturi;
554 ORDER BY id_client;
555
556 DELETE FROM Clienti WHERE id_client=6;
557 SELECT * FROM Clienti;
558 ORDER BY id_client;
559
560 DELETE FROM Tranzactii WHERE id_cont=6;
561 SELECT * FROM Tranzactii;
562 ORDER BY id_cont;
563
564 ALTER TABLE Conturi
565 ENABLE CONSTRAINT id_client_fk;
566 ALTER TABLE Imprumuturi
567 ENABLE CONSTRAINT fk_id_client;
568 ALTER TABLE Tranzactii
569 ENABLE CONSTRAINT id_cont_fk;
570
571

```

**Results**

3	10	150	12/12/2023	Plata factura	
2	10	500	12/11/2023	Plata factura	
10	20	300	10/10/2023	Plata factura	
5	30	2000	12/01/2023	Chirie	
4	30	1500	1/20/2023	Chirie	
6	50	300	12/08/2023	Transfer bancar	Activate Windows
11	70	330	06/05/2023	Comanda online	Go to Settings to activate Windows.

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**13) Afisati numele, prenumele, managerul fiecarui angajat si salariul angajatilor care au salariul mai mare decat angajatul cu id-ul 9, impreuna cu cei care lucreaza in acelasi departament ca si angajatul cu id-ul 3**

SELECT id\_angajat, nume, prenume, id\_departament, salariu, id\_manager

FROM angajati

WHERE salariu > (SELECT salariu FROM angajati WHERE id\_angajat=9)

UNION

SELECT id\_angajat, nume, prenume, id\_departament, salariu, id\_manager

FROM angajati

WHERE id\_departament IN (SELECT id\_departament FROM angajati WHERE id\_angajat=3)

ORDER BY salariu;

The screenshot shows the Oracle APEX SQL Workshop interface. The top navigation bar includes links for APEX, App Builder, SQL Workshop, Team Development, and Gallery. The SQL Workshop tab is selected. The schema dropdown is set to WKSP\_LUNGUV. The main area displays a multi-line SQL query with numerous comments and sub-selects. Below the query is a results grid with columns: ID\_ANGAJAT, NUME, PRENUME, ID\_DEPARTAMENT, SALARIU, and ID\_MANAGER. The results show five rows of employee data. At the bottom right of the results grid, there are two small informational messages: "Activate Windows" and "Go to Settings to activate Windows".

```

517 WHERE c1.id_client=<id_client AND nume LIKE 'FX';
518 --Afisati numele, prenumele, managerul fiecarui angajat si salariul angajatilor care au salariul mai mare decat angajatul cu id-ul 9, impreuna cu cel care lucreaza in acelasi departament ca si angajatul cu id-ul 3
519
520 SELECT id_angajat, nume, prenume, id_departament, salariu, id_manager
521 FROM angajati
522 WHERE salariu > (SELECT salariu FROM angajati WHERE id_angajat=9)
523
524 UNION
525
526
527 SELECT id_angajat, nume, prenume, id_departament, salariu, id_manager
528 FROM angajati
529 WHERE id_departament IN (SELECT id_departament FROM angajati WHERE id_angajat=3)
530 ORDER BY salariu;
531
532
533 --Afisati angajatii bancii care nu au fost angajati in data de 15.02.2011 si 16.02.2011, suma totala a salariilor lor si media salariilor
534
535 SELECT id_angajat, nume, prenume,data_angajarii, salariu, SUM(salariu) OVER () suma_salarilor, ROUND(AVG(salariu) OVER (), 2) media_salarilor
536 FROM angajati

```

ID_ANGAJAT	NUME	PRENUME	ID_DEPARTAMENT	SALARIU	ID_MANAGER
5	Popa	Ioana	130	7500	1
17	Balan	Ionut	210	8100	1
4	Redu	Elena	140	8200	1
5	Dumitru	Andrei	210	8500	3
23	Gavrilă	Catalina	330	8600	12

**14) O noua sucursala s-a deschis in orasul Buzau. Introduceti sucursala in tabela Sucursale, cat si orasul in tabela Orase, deoarece pana in momentul de fata nu exista nicio sucursala in orasul Buzau.**

INSERT INTO ORASE (id\_oras, nume\_oras)

VALUES (4, 'Buzau');

SELECT \* FROM ORASE

ORDER BY ID\_ORAS;

INSERT INTO SUCURSALE (id\_sucursala, id\_oras, Nume\_sucursala, Adresa)

VALUES(21,4,'BT CENTRU', 'Bulevardul Unirii 232');

SELECT \* FROM SUCURSALE

ORDER BY ID\_SUCURSALA DESC;

APEX App Builder SQL Workshop Team Development Gallery

Search Schema WKSP\_LUNGUV

SQL Commands Language SQL Rows 10 Clear Command Find Tables Save Run

```

567 ALTER TABLE Tranactii
568   ENABLE CONSTRAINT id_cont_fk;
569
570 --O noua sucursala s-a deschis in orasul Buzau. Introduceti sucursala in tabela 'Sucursale', cat si orasul in tabela 'Orase', deoarece pana in momentul de fata nu exista nicio sucursala in orasul Buzau.
571
572 INSERT INTO ORASE (id_oras, nume_oras)
573 VALUES (4, 'Buzau');
574 SELECT * FROM ORASE
575 ORDER BY ID_ORAS;
576
577 INSERT INTO SUCURSAL (id_sucursala, id_oras, Nume_sucursala, Adresa)
578 VALUES(21,4,'BT CENTRU', 'Bulevardul Unirii 232');
579 SELECT * FROM SUCURSAL
580 ORDER BY id_sucursala DESC;
581
582
583
584

```

Results Explain Describe Saved SQL History

ID_ORAS	NUME_ORAS
1	Bucuresti
2	Galati
3	Craiova
4	Buzau

4 rows returned in 0.00 seconds Download

Activate Windows Go to Settings to activate Windows.

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APEX App Builder SQL Workshop Team Development Gallery

Search Schema WKSP\_LUNGUV

SQL Commands Language SQL Rows 10 Clear Command Find Tables Save Run

```

567 ALTER TABLE Tranactii
568   ENABLE CONSTRAINT id_cont_fk;
569
570 --O noua sucursala s-a deschis in orasul Buzau. Introduceti sucursala in tabela 'Sucursale', cat si orasul in tabela 'Orase', deoarece pana in momentul de fata nu exista nicio sucursala in orasul Buzau.
571
572 INSERT INTO ORASE (id_oras, nume_oras)
573 VALUES (4, 'Buzau');
574 SELECT * FROM ORASE
575 ORDER BY ID_ORAS;
576
577 INSERT INTO SUCURSAL (id_sucursala, id_oras, Nume_sucursala, Adresa)
578 VALUES(21,4,'BT CENTRU', 'Bulevardul Unirii 232');
579 SELECT * FROM SUCURSAL
580 ORDER BY id_sucursala DESC;
581
582
583
584

```

Results Explain Describe Saved SQL History

ID_SUCURSALA	ID_ORAS	NUME_SUCURSALA	ADRESA
21	4	BT CENTRU	Bulevardul Unirii 232
20	5	BT VALEA FETII	STRADA CARACAL 95
19	5	BT CRAIOVITEI	STRADA TUFANELE 1
18	5	BT ELECTROPTR	STR IMPARATUL TRAIAN 219
17	2	BT MICRO 14	STRADA BRAILEI 200

Activate Windows Go to Settings to activate Windows.

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**15) Creati o secventa numita Viitori\_clienti care va genera id-ul viitorilor clienti incepand cu 1, va merge din 2 in 2 valori si va atinge valoarea maxima de 20.**

CREATE SEQUENCE id\_viiatori\_clienti\_seq

INCREMENT BY 2

START WITH 1

MAXVALUE 20

NOCACHE

NOCYCLE;

```
SELECT sequence_name, min_value, max_value, increment_by, last_number
FROM user_sequences;
```

The screenshot shows the Oracle APEX SQL Workshop interface. The top navigation bar includes 'APEX', 'App Builder', 'SQL Workshop', 'Team Development', and 'Gallery'. The right side shows a user profile for 'Lungu Vanesa-D...' and the schema 'WKSP\_LUNGUV'. The main area has tabs for 'SQL Commands' and 'Results'. In the 'SQL Commands' tab, the following code is visible:

```
577 INSERT INTO SUCURSAL (id_sucursal, id_ora, nume_sucursal, Adresa)
578 VALUES(1,1,'BT CENTRAL', 'Bulevardul Unirii 132');
579 SELECT * FROM SUCURSAL;
580 ORDER BY id_sucursal DESC;
581
582 --creati o secventa numita VIITORI_CLIENTI care va genera id-ul viitorilor clienti incepand cu 1, va merge din 2 in 2 valori si va atinge valoarea maxima de 20.
583
584 CREATE SEQUENCE id_vitori_clienti_seq
585 INCREMENT BY 2
586 START WITH 1
587 MAXVALUE 20
588 NOCACHE
589 NOCYCLE;
590
591 SELECT sequence_name, min_value, max_value, increment_by, last_number
592 FROM user_sequences;
593
594
595
```

In the 'Results' tab, the output of the 'SELECT' statement is shown in a table:

SEQUENCE_NAME	MIN_VALUE	MAX_VALUE	INCREMENT_BY	LAST_NUMBER
ID_VITORI_CLIENTI_SEQ	1	20	2	1

Below the table, it says '1 rows returned in 0.02 seconds' and there is a 'Download' link. The bottom right corner of the interface shows 'Activate Windows' and 'Copyright © 1999, 2023, Oracle and/or its affiliates. Oracle APEX 23.3'.

**16) Afisati clientii care au cel putin un imprumut, dar si pe cei care nu au niciun imprumut, printr-o junctiune externa la stanga.**

```
SELECT c.id_client, nume, prenume, id_imprumut
FROM clienti c, imprumuturi i
WHERE c.id_client=i.id_client(+);
```

APEX App Builder SQL Workshop Team Development Gallery

Search LV Lungu Vanesa-D... lunguv

Schema WKSP\_LUNGUV

SQL Commands Language SQL Rows 10 Clear Command Find Tables Save Run

```

591 SELECT sequence_name, min_value, max_value, increment_by, last_number
592 FROM user_sequences;
593
594 --Afisati clientii care au cel putin un imprumut, dar si pe cei care nu au niciun imprumut, printre-o junctiune externa la stanga.
595
596 SELECT c.id_client, nume, prenume, id_imprumut
597 FROM clienti c, imprumuturi i
598 WHERE c.id_client=i.id_client(+);
599
600 --Afisati clientii care au cel putin un imprumut, dar si pe cei care nu au niciun imprumut, printre-o junctiune externa la dreapta.
601
602 SELECT c.id_client, nume, prenume, id_imprumut
603 FROM clienti c, imprumuturi i
604 WHERE i.id_client(+)=c.id_client;

```

Results Explain Describe Saved SQL History

ID_CLIENT	NUME	PRENUME	ID_IMPRUMUT
1	Lungu	Vanesa-Denisa	100
2	Istrate	Andreea-Alexandra	-
3	Firan	Marian	300
4	Fluturu	Andreea	-
5	Fluturu	Patricia	-

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**17) Afisati clientii care au cel putin un imprumut, dar si pe cei care nu au niciun imprumut, printre-o junctiune externa la dreapta.**

```

SELECT c.id_client, nume, prenume, id_imprumut
FROM clienti c, imprumuturi i
WHERE i.id_client(+)=c.id_client;

```

APEX App Builder SQL Workshop Team Development Gallery

Search LV Lungu Vanesa-D... lunguv

Schema WKSP\_LUNGUV

SQL Commands Language SQL Rows 10 Clear Command Find Tables Save Run

```

591 SELECT sequence_name, min_value, max_value, increment_by, last_number
592 FROM user_sequences;
593
594 --Afisati clientii care au cel putin un imprumut, dar si pe cei care nu au niciun imprumut, printre-o junctiune externa la stanga.
595
596 SELECT c.id_client, nume, prenume, id_imprumut
597 FROM clienti c, imprumuturi i
598 WHERE c.id_client=i.id_client(+);
599
600 --Afisati clientii care au cel putin un imprumut, dar si pe cei care nu au niciun imprumut, printre-o junctiune externa la dreapta.
601
602 SELECT c.id_client, nume, prenume, id_imprumut
603 FROM clienti c, imprumuturi i
604 WHERE i.id_client(+)=c.id_client;

```

Results Explain Describe Saved SQL History

ID_CLIENT	NUME	PRENUME	ID_IMPRUMUT
1	Lungu	Vanesa-Denisa	100
2	Istrate	Andreea-Alexandra	-
3	Firan	Marian	300
4	Fluturu	Andreea	-
5	Fluturu	Patricia	-

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**18) Afisati superiorii angajatului care are salariul egal cu cel al angajatului cu id-ul 13, fara a-l include si pe acesta.**

```
SELECT id_angajat, nume, prenume, id_manager, LEVEL , SYS_CONNECT_BY_PATH(NUME, '*')
```

```
FROM angajati
```

```
CONNECT BY id_angajat=PRIOR id_manager
```

```
START WITH salariu IN (SELECT salariu FROM angajati WHERE id_angajat=13)
```

```
MINUS
```

```
SELECT id_angajat, nume, prenume, id_manager, LEVEL , SYS_CONNECT_BY_PATH(NUME, '*')
```

```
FROM angajati
```

```
WHERE id_angajat=13
```

```
CONNECT BY id_angajat=PRIOR id_manager
```

```
START WITH salariu IN (SELECT salariu FROM angajati WHERE id_angajat=13)
```

```
ORDER BY id_angajat;
```

The screenshot shows the Oracle APEX SQL Workshop interface. The top navigation bar includes APEX, App Builder, SQL Workshop (selected), Team Development, and Gallery. The right side shows a workspace titled "Lungu Vanesa-D... lungu". The main area has tabs for SQL Commands, Results, Explain, Describe, Saved SQL, and History. The SQL Commands tab contains the following code:

```
005 --Afisati superiorii angajatului care are salariul egal cu cel al angajatului cu id-ul 13, fara a-l include si pe acesta.
006
007
008 SELECT id_angajat, nume, prenume, id_manager, LEVEL , SYS_CONNECT_BY_PATH(NUME, '*')
009 FROM angajati
010 CONNECT BY id_angajat=PRIOR id_manager
011 START WITH salariu IN (SELECT salariu FROM angajati WHERE id_angajat=13)
012 MINUS
013 SELECT id_angajat, nume, prenume, id_manager, LEVEL , SYS_CONNECT_BY_PATH(NUME, '*')
014 FROM angajati
015 WHERE id_angajat<13
016 CONNECT BY id_angajat=PRIOR id_manager
017 START WITH salariu IN (SELECT salariu FROM angajati WHERE id_angajat=13)
018 ORDER BY id_angajat;
019
```

The Results tab displays the query output:

ID_ANGAJAT	NUME	PRENUME	ID_MANAGER	LEVEL	SYS_CONNECT_BY_PATH(NUME, "")
1	Lungu	Dragos	100	3	*Ionescu#Radu#Lungu
2	Ionescu	Mihai	100	2	*Moldovan#Ionescu
4	Radu	Elena	1	2	*Ionescu#Radu
7	Moldovan	Cristina	2	1	*Moldovan
100	Popescu	Ana	-	3	*Moldovan#Ionescu#Popescu

At the bottom of the results table, there is a message: "Activate Windows Go to Settings to activate Windows."

**19) Realizati o statistica pe fiecare department referitoare la salariul minim, salariul mediu, salariul maxim si numarul total de angajati.**

```
SELECT a.id_departament, nume_departament, min(salariu) Salariu_minim, max(salariu) Salariu_maxim,
ROUND(AVG(salariu),1) Salariu_mediul, count(id_angajat) Numar_angajati

FROM Angajati a, Departamente d

WHERE a.id_departament=d.id_departament

GROUP BY a.id_departament, nume_departament

order by id_departament;
```

The screenshot shows the Oracle APEX SQL Workshop interface. The SQL command window contains the query code, which includes a comment explaining the purpose of the statistics. The results window displays a table with six columns: ID\_DEPARTAMENT, NUME\_DEPARTAMENT, SALARIU\_MINIM, SALARIU\_MAXIM, SALARIU\_MEDIU, and NUMAR\_ANGAJATI. The data shows five departments with their respective salary ranges and counts of employees.

ID_DEPARTAMENT	NUME_DEPARTAMENT	SALARIU_MINIM	SALARIU_MAXIM	SALARIU_MEDIU	NUMAR_ANGAJATI
110	FINANTE	7000	9200	8056.7	3
120	MARKETING	7900	9000	8450	2
130	IT	7500	8700	8100	2
140	RESURSE UMANE	8200	9400	8800	2
210	FINANTE	8100	8500	8300	2
220	MARKETING	7800	8700	8250	2

**20) Sa se modifice tabela angajati astfel: salariul creste cu 5% pentru cei angajati de cel mult de 5 ani, 10% pentru cei angajati de 6-10 ani, iar pentru ceilalți, 15%**

UPDATE ANGAJATI

```
SET salariu=CASE WHEN EXTRACT(YEAR FROM SYSDATE)-EXTRACT(YEAR FROM DATA_ANGAJARII)<=5
THEN salariu*1.05
```

```
WHEN EXTRACT(YEAR FROM SYSDATE)-EXTRACT(YEAR FROM DATA_ANGAJARII) BETWEEN 6 AND 10
THEN salariu*1.1
```

ELSE salariu\*1.15 END

SELECT \* FROM ANGAJATI;

The screenshot shows the Oracle APEX SQL Workshop interface. The top navigation bar includes APEX, App Builder, SQL Workshop, Team Development, and Gallery. The SQL Workshop tab is selected. The schema is set to WKSP\_LUNGUV. The main area displays the following SQL code:

```
019 --Realizati o statistica pe fiecare departament referitoare la salariul minim, salariul mediu, salariul maxim si numarul total de angajati.
020
021 SELECT a.id_departament, nume_departament, min(salariu) Salariu_minim, max(salariu) Salariu_maxim, ROUND( AVG(salariu),1) Salariu_mediu, count(id_angajat) Numar_angajati
022 FROM Angajati a, Departamente d
023 WHERE a.id_departament=d.id_departament
024 GROUP BY a.id_departament, nume_departament
025 ORDER BY id_departament;
026
027 --Sa se modifice tabela angajati astfel: salariul creste cu 5% pentru cel angajati de cel mult de 5 ani, 10% pentru cei angajati de 6-10 ani, iar pentru ceilalți, 15%
028
029 UPDATE ANGAJATI
030 SET salariu=CASE WHEN EXTRACT(YEAR FROM SYSDATE)-EXTRACT(YEAR FROM DATA_ANGAJARI)<=5 THEN salariu*1.05
031 WHEN EXTRACT(YEAR FROM SYSDATE)-EXTRACT(YEAR FROM DATA_ANGAJARI) BETWEEN 6 AND 10 THEN salariu*1.1
032 ELSE salariu*1.15 END
033
034 SELECT * FROM ANGAJATI;
035
036
```

The results section shows a table with the following data:

ID_ANGAJAT	ID_DEPARTAMENT	ID_MANAGER	NUME	PRENUME	SALARIU	DATA_ANGAJARI	VARSTA
22	520	15	Costin	Sorin	10695	03/03/2012	50
1	110	100	Lungu	Dragos	8400	02/11/2020	24
3	130	1	Popa	Ioana	8625	02/15/2010	40
100	110	-	Popescu	Ana	7350	02/07/2020	30
2	120	100	Ionescu	Mihai	9450	02/02/2018	35
4	140	1	Radu	Elena	9020	02/14/2015	41

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