

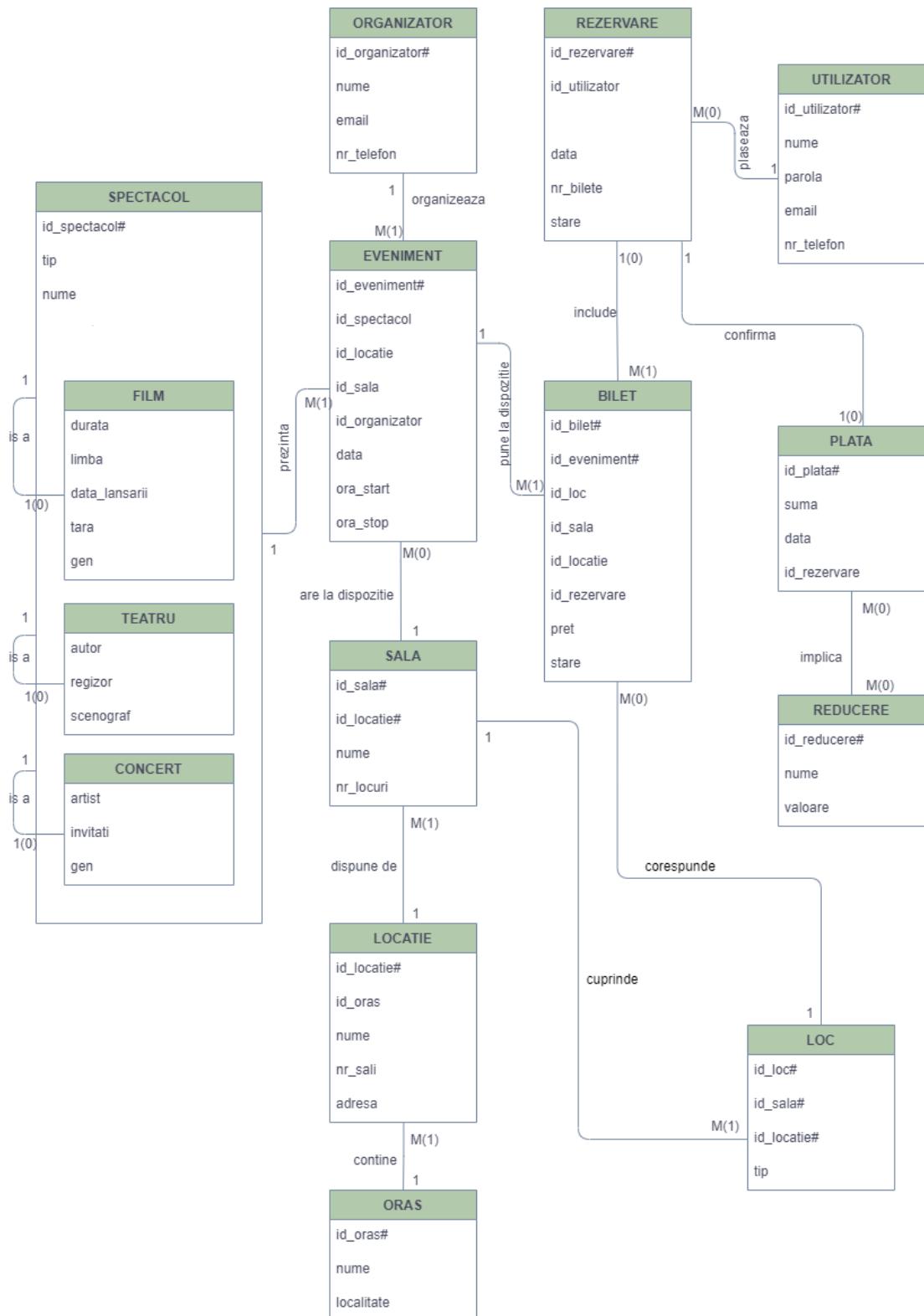
Proiect – Sisteme de Gestiuie a Bazelor de Date

Model de bază de date a unei platforme online de bilete pentru evenimente

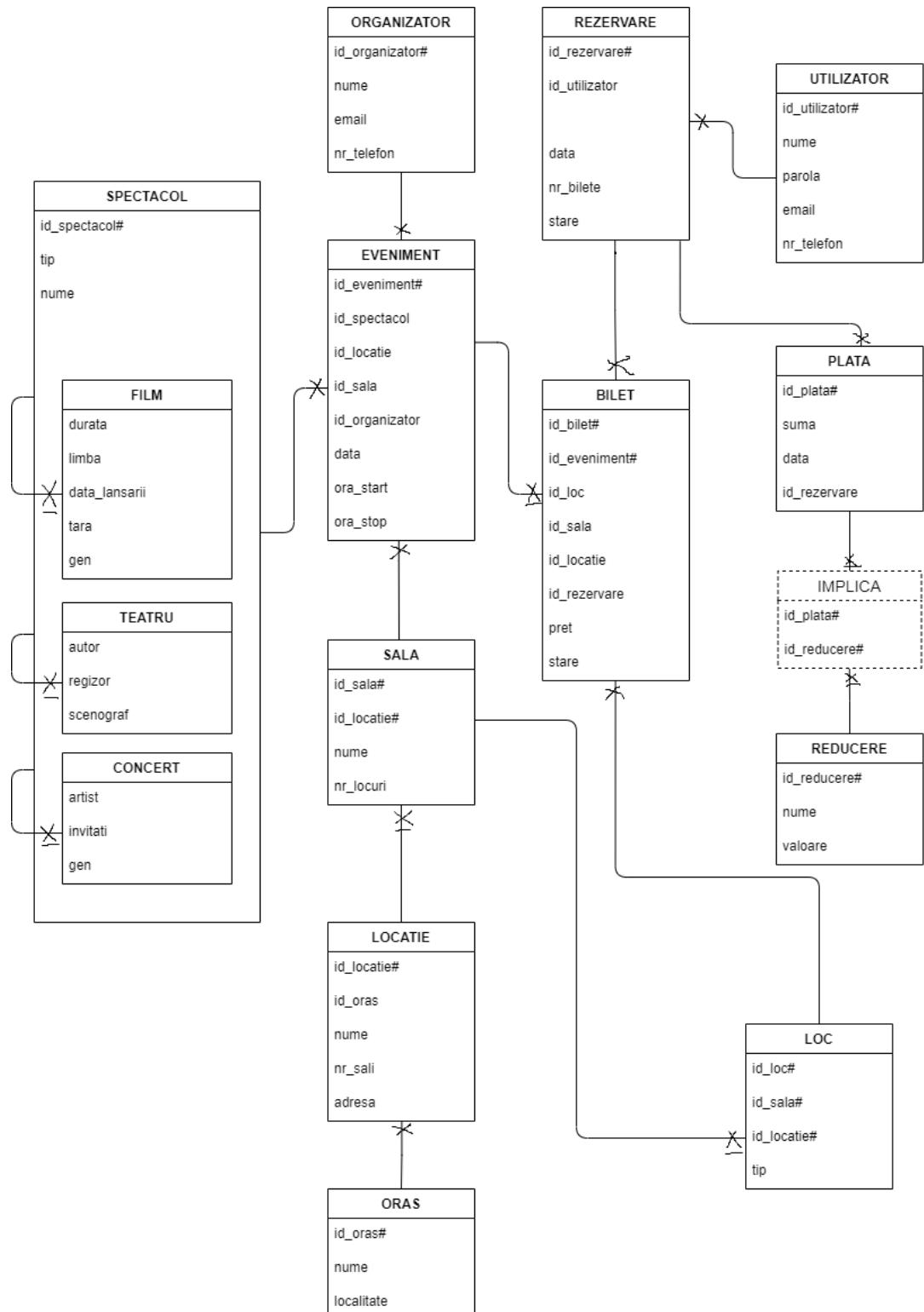
1. Prezentarea bazei de date și a utilității ei

Tema pe care am ales-o pentru acest proiect este *baza de date a unei platforme ce se ocupă cu distribuirea de bilete pentru diferite spectacole și evenimente*. Modelul de date va centraliza programul pentru mai multe locații care găzduiesc aceste evenimente și va permite atât rezervarea de locuri, cât și cumpărarea de bilete, facilitând procesul de planificare a participării în timpul liber la astfel de activități. Spectacolele din baza de date pot fi atât spectacole de teatru, cât și filme sau concerte. Spectacolele se desfășoară în cadrul unor evenimente, pentru care se cunosc organizatorii și locația exactă, inclusiv orașul, clădirea și sala. Fiecare sală dispune de mai multe locuri, asociate unor bilete individuale fiecarui eveniment. Persoanele care vor să folosească platforma trebuie să se înscrie ca utilizatori, după care pot efectua rezervări pentru orice număr de bilete ale oricărui eveniment, pe care le pot și plati online eventual. Plata ține cont și de reducerile posibile. Fiind digitalizat întregul proces de rezervare, nu este nevoie de angajați care să gestioneze vânzările.

2. Realizarea diagramei ER



3. Realizarea diagramei conceptuale corespunzătoare diagramei entitate-relație proiectate



4. Implementarea în Oracle a diagramei conceptuale:

-- secvența cu ajutorul căreia se vor crea id-urile utilizatorilor:

```
CREATE SEQUENCE secv_utilizator
```

START with 1

INCREMENT by 1

MINVALUE 0

MAXVALUE 1000

NOCYCLE;

The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with options like Home, SQL Worksheet (which is selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet". It contains the following SQL code:

```
1 CREATE SEQUENCE secv_utilizator
2 START with 1
3 INCREMENT by 1
4 MINVALUE 0
5 MAXVALUE 1000
6 NOCYCLE;
```

Below the code, a message says "Sequence created.". At the bottom of the interface, there's a footer with the text: "2022 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤ using Oracle APEX - Privacy - Terms of Use".

--crearea tabelelor:

```
CREATE TABLE SPECTACOL(
```

id_spectacol int primary key,

tip varchar2(20) not null,

nume varchar2(100) not null

);

```
CREATE TABLE FILM(
```

id_spectacol int primary key,

durata int,

limba varchar2(20),

```
data_lansarii date,  
tara varchar2(20),  
gen varchar2(20),  
constraint fk_spectacolfilm foreign key (id_spectacol) references spectacol(id_spectacol)  
);
```

The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with options like Home, SQL Worksheet (which is selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet" and contains the following SQL code:

```
1 CREATE TABLE SPECTACOL(  
2 id_spectacol int primary key,  
3 tip varchar2(20) not null,  
4 nume varchar2(100) not null  
5 );  
6  
7 CREATE TABLE FILM(  
8 id_spectacol int primary key,  
9 durata int,  
10 limba varchar2(20),  
11 data_lansarii date,  
12 tara varchar2(20),  
13 gen varchar2(20),  
14 constraint fk_spectacolfilm foreign key (id_spectacol) references spectacol(id_spectacol)  
15 );
```

Below the code, there are two "Table created." messages. At the bottom of the interface, it says "2022 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤ using Oracle APEX - Privacy - Terms of Use".

```
CREATE TABLE TEATRU(  
id_spectacol int primary key,  
autor varchar2(50),  
regizor varchar2(50),  
scenograf varchar2(50),  
constraint fk_spectacolteatru foreign key (id_spectacol) references spectacol(id_spectacol)  
);  
  
CREATE TABLE CONCERT(  
id_spectacol int primary key,  
artist varchar2(50),  
invitati varchar2(100),  
gen varchar2(50),  
constraint fk_spectacolconcert foreign key (id_spectacol) references spectacol(id_spectacol)
```

');

The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with navigation links: Home, SQL Worksheet (which is selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet". It contains two blocks of SQL code:

```
1 CREATE TABLE TEATRU
2   id_spectacol int primary key,
3   autor varchar2(50),
4   regizor varchar2(50),
5   scenograf varchar2(50),
6   constraint fk_spectacolteatru foreign key (id_spectacol) references spectacol(id_spectacol)
7   ;
8
9 CREATE TABLE CONCERT(
10   id_spectacol int primary key,
11   artist varchar2(50),
12   invitati varchar2(100),
13   gen varchar2(50),
14   constraint fk_spectacolconcert foreign key (id_spectacol) references spectacol(id_spectacol)
15 );
```

Below the code, there are two messages: "Table created." and "Table created.". At the bottom of the interface, a footer bar displays: "2022 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom · Dev Gym" and "Built with ❤ using Oracle APEX - Privacy - Terms of Use".

CREATE TABLE ORGANIZATOR(

```
  id_organizator int primary key,
  nume varchar2(50) not null,
  email varchar2(50) not null,
  nr_telefon varchar2(20) not null
);
```

CREATE TABLE ORAS(

```
  id_oras int primary key,
  nume varchar2(50) not null,
  localitate varchar2(50) not null
);
```

CREATE TABLE LOCATIE(

```
  id_locatie int primary key,
  id_oras int not null,
  nume varchar2(50) not null,
  nr_sali int not null,
  adresa varchar2(100) not null
```

);

The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with navigation links: Home, SQL Worksheet (which is selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet" and contains the following SQL code:

```
1 CREATE TABLE ORGANIZATOR(
2   id_organizator int primary key,
3   nume varchar2(50) not null,
4   email varchar2(50) not null,
5   nr_telefon varchar2(20) not null
6 );
7
8 CREATE TABLE ORAS(
9   id_oras int primary key,
10  nume varchar2(50) not null,
11  localitate varchar2(50) not null
12 );
13
14 CREATE TABLE LOCATIE(
15   id_locatie int primary key,
16   id_oras int not null,
17   nume varchar2(50) not null,
18   nr_sali int not null,
19   adresa varchar2(100) not null
20 );
```

Below the code, the output shows three "Table created." messages. At the bottom of the worksheet, there's a footer with the text: "2022 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 · Database Documentation · Ask Tom · Dev Gym" and "Built with ❤ using Oracle APEX · Privacy · Terms of Use".

CREATE TABLE SALA(

```
id_sala int not null,
id_locatie int not null,
nume varchar2(50) not null,
nr_locuri int,
primary key (id_sala, id_locatie),
constraint fk_locatiesala foreign key (id_locatie) references locatie(id_locatie)
);
```

CREATE TABLE EVENIMENT(

```
id_eveniment int primary key,
id_spectacol int not null,
id_locatie int not null,
id_sala int not null,
id_organizator int not null,
data_eveniment date not null,
ora_start varchar2(10) not null,
ora_stop varchar2(10) not null,
```

```
constraint fk_spectacoleveniment foreign key (id_spectacol) references spectacol(id_spectacol),
constraint fk_salaeveniment foreign key (id_sala, id_locatie) references sala(id_sala, id_locatie),
constraint fk_organizatoreveniment foreign key (id_organizator) references organizator(id_organizator)
);
```

The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with navigation links: Home, SQL Worksheet (selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet" and contains the following SQL code:

```
1 CREATE TABLE SALA(
2   id_sala int not null,
3   id_locatie int not null,
4   nume varchar2(50) not null,
5   nr_locuri int,
6   primary key (id_sala, id_locatie),
7   constraint fk_locatiesala foreign key (id_locatie) references locatie(id_locatie)
8 );
9
10 CREATE TABLE EVENIMENT(
11   id_eveniment int primary key,
12   id_spectacol int not null,
13   id_locatie int not null,
14   id_sala int not null,
15   id_organizator int not null,
16   data_eveniment date not null,
17   ora_start varchar2(10) not null,
18   ora_stop varchar2(10) not null,
19   constraint fk_spectacoleveniment foreign key (id_spectacol) references spectacol(id_spectacol),
20   constraint fk_salaeveniment foreign key (id_sala, id_locatie) references sala(id_sala, id_locatie),
21   constraint fk_organizatoreveniment foreign key (id_organizator) references organizator(id_organizator)
22 );
```

Below the code, two messages are displayed: "Table created." and "Table created.". At the bottom of the interface, there's a footer with the text: "2022 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom · Dev Gym" and "Built with ❤ using Oracle APEX · Privacy · Terms of Use".

CREATE TABLE LOC(

```
  id_loc int not null,
  id_sala int not null,
  id_locatie int not null,
  tip varchar2(50) not null,
  primary key (id_loc, id_sala, id_locatie),
  constraint fk_salaloc foreign key (id_sala, id_locatie) references sala(id_sala, id_locatie)
);
```

CREATE TABLE UTILIZATOR(

```
  id_utilizator int primary key,
  nume varchar2(50) not null,
  parola varchar2(50) not null,
  email varchar2(50) not null,
```

nr_telefon varchar2(20) not null

);

The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with options like Home, SQL Worksheet, My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet". It contains the following SQL code:

```
1 CREATE TABLE LOC(
2   id_loc int not null,
3   id_sala int not null,
4   id_locatie int not null,
5   tip varchar2(50) not null,
6   primary key (id_loc, id_sala, id_locatie),
7   constraint fk_salaloc foreign key (id_sala, id_locatie) references sala(id_sala, id_locatie)
8 );
9
10
11 CREATE TABLE UTILIZATOR(
12   id_utilizator int primary key,
13   nume varchar2(50) not null,
14   parola varchar2(50) not null,
15   email varchar2(50) not null,
16   nr_telefon varchar2(20) not null
17 );
```

Below the code, the output shows two "Table created." messages. At the bottom of the worksheet, there's a footer with copyright information.

CREATE TABLE REZERVARE(

id_rezervare int primary key,

id_utilizator int not null,

data_rezervare date not null,

nr_bilete int not null,

stare int not null,

constraint fk_utilizatorrezervare foreign key (id_utilizator) references utilizator(id_utilizator)

);

CREATE TABLE BILET(

id_bilet int,

id_eveniment int,

id_loc int not null,

id_sala int not null,

id_locatie int not null,

id_rezervare int,

pret int not null,

stare int not null,

primary key (id_bilet, id_eveniment),

constraint fk_locbilet foreign key (id_loc, id_sala, id_locatie) references loc(id_loc, id_sala, id_locatie),

constraint fk_evenimentbilet foreign key (id_eveniment) references eveniment(id_eveniment),

constraint fk_rezervarebilet foreign key (id_rezervare) references rezervare(id_rezervare)

);

The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with options like Home, SQL Worksheet (which is selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet". It contains the following SQL code:

```
1 CREATE TABLE REZERVARE(
2   id_rezervare int primary key,
3   id_utilizator int not null,
4   data_rezervare date not null,
5   nr_bilet int not null,
6   stare int not null,
7   constraint fk_utilizatorrezervare foreign key (id_utilizator) references utilizator(id_utilizator));
8
9 CREATE TABLE BILET(
10   id_bilet int,
11   id_eveniment int,
12   id_loc int not null,
13   id_sala int not null,
14   id_locatie int not null,
15   id_rezervare int,
16   pret int not null,
17   stare int not null,
18   primary key (id_bilet, id_eveniment),
19   constraint fk_locbilet foreign key (id_loc, id_sala, id_locatie) references loc(id_loc, id_sala, id_locatie),
20   constraint fk_evenimentbilet foreign key (id_eveniment) references eveniment(id_eveniment),
21   constraint fk_rezervarebilet foreign key (id_rezervare) references rezervare(id_rezervare)
22 );
```

Below the code, two "Table created." messages are displayed. At the bottom of the interface, there's a footer with the text: "2022 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation · Ask Tom · Dev Gym" and "Built with ❤ using Oracle APEX · Privacy · Terms of Use".

CREATE TABLE PLATA(

id_plata int primary key,

suma int not null,

data_plata date not null,

id_rezervare int not null,

constraint fk_rezervareplata foreign key (id_rezervare) references rezervare(id_rezervare)

);

CREATE TABLE REDUCERE(

id_reducere int primary key,

nume varchar2(50) not null,

valoare int not null

);

CREATE TABLE IMPLICA(

id_plata int,

id_reducere int,

primary key (id_plata, id_reducere),

constraint fk_plataimplica foreign key (id_plata) references plata(id_plata),

constraint fk_reducereimplica foreign key (id_reducere) references reducere(id_reducere)

);

The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with navigation links: Home, SQL Worksheet (which is selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet". It contains the following SQL code:

```
1 CREATE TABLE PLATA(
2   id_plata int primary key,
3   suma int not null,
4   data_plata date not null,
5   id_rezervare int not null,
6   constraint fk_rezervareplata foreign key (id_rezervare) references rezervare(id_rezervare));
7
8 CREATE TABLE REDUCERE(
9   id_reducere int primary key,
10  nume varchar2(50) not null,
11  valoare int not null
12 );
13
14 CREATE TABLE IMPLICA(
15   id_plata int,
16   id_reducere int,
17   primary key (id_plata, id_reducere),
18   constraint fk_plataimplica foreign key (id_plata) references plata(id_plata),
19   constraint fk_reducereimplica foreign key (id_reducere) references reducere(id_reducere)
20 );
```

Below the code, the results of the execution are shown: "Table created.", "Table created.", and "Table created.". At the bottom of the interface, there's a footer with the text: "2022 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤ using Oracle APEX - Privacy - Terms of Use".

5. Adaugarea de informații coerente în tabelele create:

INSERT INTO spectacol VALUES (1, 'film', 'Omul cu umbra');

INSERT INTO spectacol VALUES (2, 'film', 'The Shawshank Redemption');

INSERT INTO spectacol VALUES (3, 'film', 'The Godfather');

INSERT INTO spectacol VALUES (4, 'film', 'The Dark Knight');

INSERT INTO spectacol VALUES (5, 'film', 'Pulp Fiction');

INSERT INTO spectacol VALUES (6, 'film', 'Amelie');

INSERT INTO spectacol VALUES (7, 'film', 'Fight Club');

INSERT INTO spectacol VALUES (8, 'film', 'The Passion of Joan of Arc');

INSERT INTO spectacol VALUES (9, 'film', 'Forrest Gump');

```
INSERT INTO spectacol VALUES (10, 'film', 'La Vie en Rose');

INSERT INTO spectacol VALUES (11, 'film', 'Amintiri din Epoca de Aur');

INSERT INTO spectacol VALUES (12, 'film', 'Filantropica');

INSERT INTO spectacol VALUES (13, 'teatru', 'Long Days Journey Into Night');

INSERT INTO spectacol VALUES (14, 'teatru', 'Hamlet');

INSERT INTO spectacol VALUES (15, 'teatru', 'Whos Afraid of Virginia Woolf?');

INSERT INTO spectacol VALUES (16, 'teatru', 'Death of a Salesman ');

INSERT INTO spectacol VALUES (17, 'teatru', 'Oedipus Rex');

INSERT INTO spectacol VALUES (18, 'teatru', 'Angels in America');

INSERT INTO spectacol VALUES (19, 'teatru', 'The Glass Menagerie');

INSERT INTO spectacol VALUES (20, 'teatru', 'Look Back in Anger');

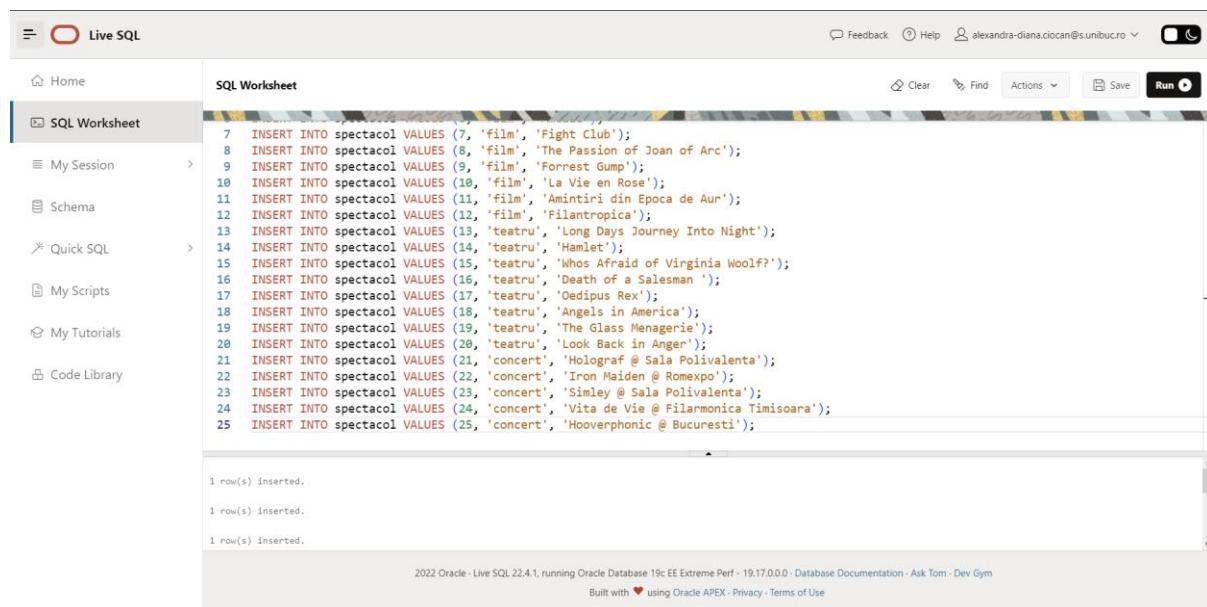
INSERT INTO spectacol VALUES (21, 'concert', 'Holograf @ Sala Polivalenta');

INSERT INTO spectacol VALUES (22, 'concert', 'Iron Maiden @ Romexpo');

INSERT INTO spectacol VALUES (23, 'concert', 'Simley @ Sala Polivalenta');

INSERT INTO spectacol VALUES (24, 'concert', 'Vita de Vie @ Filarmonica Timisoara');

INSERT INTO spectacol VALUES (25, 'concert', 'Hooverphonic @ Bucuresti');
```



The screenshot shows the Oracle Live SQL interface. The left sidebar contains navigation links: Home, SQL Worksheet (selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet" and displays the 25 INSERT statements. Below the worksheet, three lines of output are shown: "1 row(s) inserted.", "1 row(s) inserted.", and "1 row(s) inserted.". At the bottom of the interface, a footer bar includes links for Feedback, Help, and account information (alexandra-diana.ciocan@s.unibuc.ro). On the far right, there are buttons for Clear, Find, Actions, Save, and Run.

```
7 INSERT INTO spectacol VALUES (7, 'film', 'Fight Club');
8 INSERT INTO spectacol VALUES (8, 'film', 'The Passion of Joan of Arc');
9 INSERT INTO spectacol VALUES (9, 'film', 'Forrest Gump');
10 INSERT INTO spectacol VALUES (10, 'film', 'La Vie en Rose');
11 INSERT INTO spectacol VALUES (11, 'film', 'Amintiri din Epoca de Aur');
12 INSERT INTO spectacol VALUES (12, 'film', 'Filantropica');
13 INSERT INTO spectacol VALUES (13, 'teatru', 'Long Days Journey Into Night');
14 INSERT INTO spectacol VALUES (14, 'teatru', 'Hamlet');
15 INSERT INTO spectacol VALUES (15, 'teatru', 'Whos Afraid of Virginia Woolf?');
16 INSERT INTO spectacol VALUES (16, 'teatru', 'Death of a Salesman ');
17 INSERT INTO spectacol VALUES (17, 'teatru', 'Oedipus Rex');
18 INSERT INTO spectacol VALUES (18, 'teatru', 'Angels in America');
19 INSERT INTO spectacol VALUES (19, 'teatru', 'The Glass Menagerie');
20 INSERT INTO spectacol VALUES (20, 'teatru', 'Look Back in Anger');
21 INSERT INTO spectacol VALUES (21, 'concert', 'Holograf @ Sala Polivalenta');
22 INSERT INTO spectacol VALUES (22, 'concert', 'Iron Maiden @ Romexpo');
23 INSERT INTO spectacol VALUES (23, 'concert', 'Simley @ Sala Polivalenta');
24 INSERT INTO spectacol VALUES (24, 'concert', 'Vita de Vie @ Filarmonica Timisoara');
25 INSERT INTO spectacol VALUES (25, 'concert', 'Hooverphonic @ Bucuresti');
```

1 row(s) inserted.
1 row(s) inserted.
1 row(s) inserted.

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The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with navigation links: Home, SQL Worksheet (which is selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet" and contains the following code:

```
1 select * from spectacol;
```

Below the code, a table is displayed with the following data:

ID_SPECTACOL	TIP	NUME
1	film	Omul cu umbra
2	film	The Shawshank Redemption
3	film	The Godfather
4	film	The Dark Knight
5	film	Pulp Fiction
6	film	Amelie
7	film	Fight Club
8	film	The Passion of Joan of Arc
9	film	Forrest Gump
10	film	La Vie en Rose

At the bottom of the interface, there is a footer with the text: "2023 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤ using Oracle APEX - Privacy - Terms of Use".

```
INSERT INTO film VALUES (1, 136, 'Romana', to_date('1997-04-17', 'yyyy-mm-dd'), 'Romania', 'Documentar');
```

```
INSERT INTO film VALUES (2, 110, 'Engleza', to_date('2011-09-14', 'yyyy-mm-dd'), 'Marea Britanie', 'Thriller');
```

```
INSERT INTO film VALUES (3, 140, 'Engleza', to_date('1998-09-10', 'yyyy-mm-dd'), 'SUA', 'Thriller');
```

```
INSERT INTO film VALUES (4, 109, 'Engleza', to_date('2015-07-16', 'yyyy-mm-dd'), 'SUA', 'Actiune');
```

```
INSERT INTO film VALUES (5, 138, 'Engleza', to_date('1999-07-06', 'yyyy-mm-dd'), 'SUA', 'Actiune');
```

```
INSERT INTO film VALUES (6, 119, 'Franceza', to_date('2004-07-19', 'yyyy-mm-dd'), 'Franta', 'Drama');
```

```
INSERT INTO film VALUES (7, 131, 'Engleza', to_date('1998-09-20', 'yyyy-mm-dd'), 'SUA', 'Actiune');
```

```
INSERT INTO film VALUES (8, 125, 'Franceza', to_date('2020-05-04', 'yyyy-mm-dd'), 'Franta', 'Istoric');
```

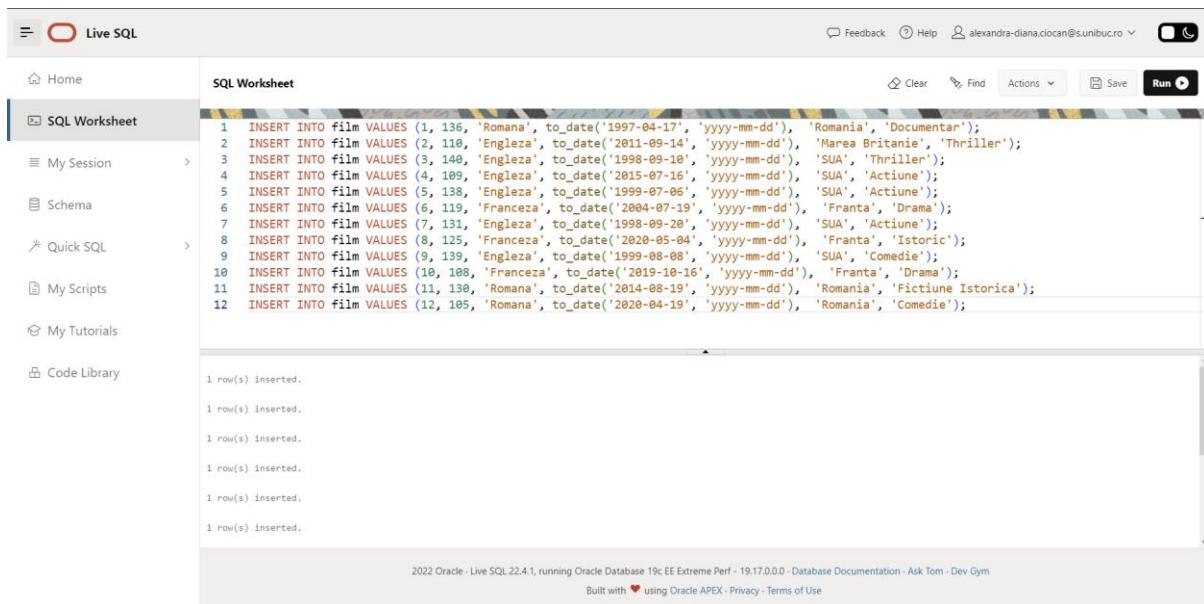
```
INSERT INTO film VALUES (9, 139, 'Engleza', to_date('1999-08-08', 'yyyy-mm-dd'), 'SUA', 'Comedie');
```

```
INSERT INTO film VALUES (10, 108, 'Franceza', to_date('2019-10-16', 'yyyy-mm-dd'), 'Franta', 'Drama');
```

```
INSERT INTO film VALUES (11, 130, 'Romana', to_date('2014-08-19', 'yyyy-mm-dd'), 'Romania', 'Fictiune Istorica');
```

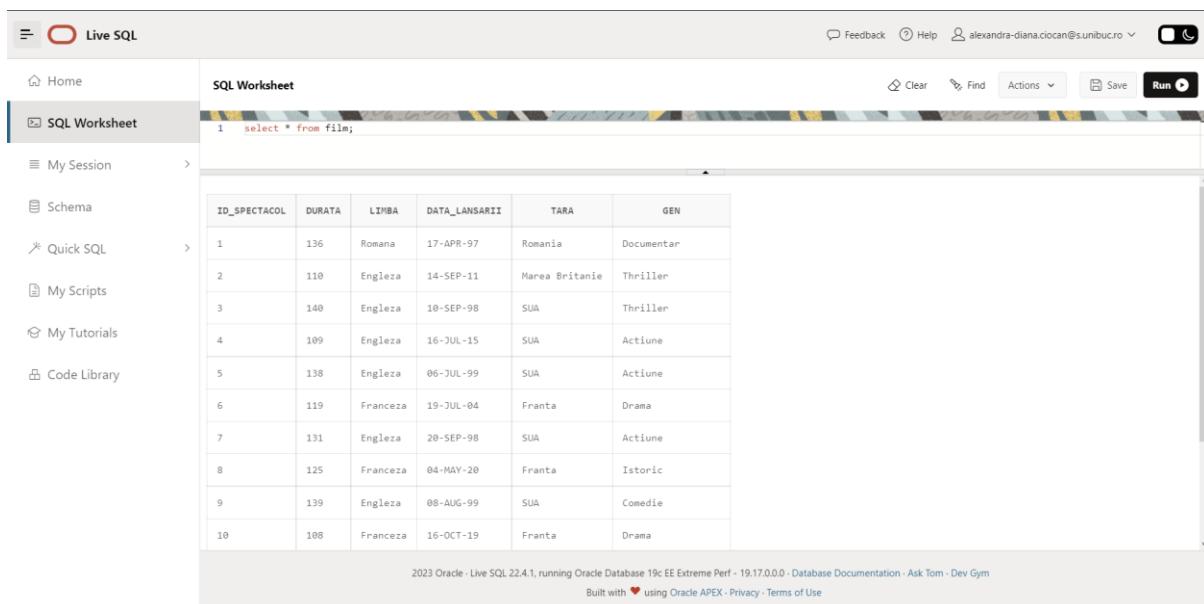
```
INSERT INTO film VALUES (12, 105, 'Romana', to_date('2020-04-19', 'yyyy-mm-dd'), 'Romania', 'Comedie');
```

Ciocan Alexandra-Diana, grupa 232



The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with navigation links: Home, SQL Worksheet (which is selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet". It contains 12 INSERT statements into the "film" table. Below the code, the output shows 12 rows inserted. At the bottom, a footer bar includes "Feedback", "Help", "alexandra-diana.ciocan@s.unibuc.ro", and a "Run" button.

```
1 INSERT INTO film VALUES (1, 136, 'Romana', to_date('1997-04-17', 'yyyy-mm-dd'), 'Romania', 'Documentar');
2 INSERT INTO film VALUES (2, 110, 'Engleza', to_date('2011-09-14', 'yyyy-mm-dd'), 'Marea Britanie', 'Thriller');
3 INSERT INTO film VALUES (3, 140, 'Engleza', to_date('1998-09-10', 'yyyy-mm-dd'), 'SUA', 'Thriller');
4 INSERT INTO film VALUES (4, 109, 'Engleza', to_date('2015-07-16', 'yyyy-mm-dd'), 'SUA', 'Actiune');
5 INSERT INTO film VALUES (5, 138, 'Engleza', to_date('1999-07-06', 'yyyy-mm-dd'), 'SUA', 'Actiune');
6 INSERT INTO film VALUES (6, 119, 'Franceza', to_date('2004-07-19', 'yyyy-mm-dd'), 'Franta', 'Drama');
7 INSERT INTO film VALUES (7, 131, 'Engleza', to_date('1998-09-28', 'yyyy-mm-dd'), 'SUA', 'Actiune');
8 INSERT INTO film VALUES (8, 125, 'Franceza', to_date('2020-05-04', 'yyyy-mm-dd'), 'Franta', 'Istoric');
9 INSERT INTO film VALUES (9, 139, 'Engleza', to_date('1999-08-08', 'yyyy-mm-dd'), 'SUA', 'Comedie');
10 INSERT INTO film VALUES (10, 108, 'Franceza', to_date('2019-10-16', 'yyyy-mm-dd'), 'Franta', 'Drama');
11 INSERT INTO film VALUES (11, 130, 'Romana', to_date('2014-08-19', 'yyyy-mm-dd'), 'Romania', 'Fictiune Istorica');
12 INSERT INTO film VALUES (12, 105, 'Romana', to_date('2020-04-19', 'yyyy-mm-dd'), 'Romania', 'Comedie');
```



The screenshot shows the Oracle Live SQL interface. The sidebar is identical to the first one. The main area is titled "SQL Worksheet". It contains a single line of code: "1 select * from film;". Below the code is a table with 10 rows of data. The table has columns: ID_SPECTACOL, DURATA, LIMBA, DATA_LANSARII, TARA, and GEN. The data corresponds to the 12 rows inserted in the previous screenshot. At the bottom, a footer bar includes "Feedback", "Help", "alexandra-diana.ciocan@s.unibuc.ro", and a "Run" button.

ID_SPECTACOL	DURATA	LIMBA	DATA_LANSARII	TARA	GEN
1	136	Romana	17-APR-97	Romania	Documentar
2	110	Engleza	14-SEP-11	Marea Britanie	Thriller
3	140	Engleza	10-SEP-98	SUA	Thriller
4	109	Engleza	16-JUL-15	SUA	Actiune
5	138	Engleza	06-JUL-99	SUA	Actiune
6	119	Franceza	19-JUL-04	Franta	Drama
7	131	Engleza	20-SEP-98	SUA	Actiune
8	125	Franceza	04-MAY-20	Franta	Istoric
9	139	Engleza	08-AUG-99	SUA	Comedie
10	108	Franceza	16-OCT-19	Franta	Drama

INSERT INTO teatru VALUES (13, 'Eugene O'Neill', 'Radu Afrim', 'Elena Fortu');

INSERT INTO teatru VALUES (14, 'William Shakespeare', 'Andrei Serban', 'Petrica Ionescu');

INSERT INTO teatru VALUES (15, 'Edward Albee', 'Victor Ioan Frunza', 'Livia Ante');

INSERT INTO teatru VALUES (16, 'Arthur Miller', 'Claudiu Goga', 'Elena Fortu');

INSERT INTO teatru VALUES (17, 'Sophocles', 'Andrei Serban', 'Lidia Luludis');

INSERT INTO teatru VALUES (18, 'Tony Kushner', 'Victor Ioan Frunza', 'Nelly Merola');

INSERT INTO teatru VALUES (19, 'Tennessee Williams', 'Claudiu Goga', 'Virgil Moise');

INSERT INTO teatru VALUES (20, 'John Osborne', 'Radu Afrim', 'Livia Ante');

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The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with navigation links: Home, SQL Worksheet (which is selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet". It contains the following SQL code:

```
1 INSERT INTO teatru VALUES (13, 'Eugene O'Neill', 'Radu Afrim', 'Elena Fortu');
2 INSERT INTO teatru VALUES (14, 'William Shakespeare', 'Andrei Serban', 'Petrica Ionescu');
3 INSERT INTO teatru VALUES (15, 'Edward Albee', 'Victor Ioan Frunza', 'Livia Ante');
4 INSERT INTO teatru VALUES (16, 'Arthur Miller', 'Claudiu Goga', 'Elena Fortu');
5 INSERT INTO teatru VALUES (17, 'Sophocles', 'Andrei Serban', 'Lidia Luludis');
6 INSERT INTO teatru VALUES (18, 'Tony Kushner', 'Victor Ioan Frunza', 'Nelly Merola');
7 INSERT INTO teatru VALUES (19, 'Tennessee Williams', 'Claudiu Goga', 'Virgil Moise');
8 INSERT INTO teatru VALUES (20, 'John Osborne', 'Radu Afrim', 'Livia Ante');
```

Below the code, the results are displayed as:

```
1 row(s) inserted.  
1 row(s) inserted.
```

At the bottom of the worksheet, it says "2022 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤ using Oracle APEX - Privacy - Terms of Use".

The screenshot shows the Oracle Live SQL interface. The sidebar is identical to the first one. The main area is titled "SQL Worksheet". It contains the following SQL code:

```
1 select * from teatru;
```

Below the code, the results are displayed in a table:

ID_SPECTACOL	AUTOR	REGIZOR	SCENOGRAF
13	Eugene O'Neill	Radu Afrim	Elena Fortu
14	William Shakespeare	Andrei Serban	Petrica Ionescu
15	Edward Albee	Victor Ioan Frunza	Livia Ante
16	Arthur Miller	Claudiu Goga	Elena Fortu
17	Sophocles	Andrei Serban	Lidia Luludis
18	Tony Kushner	Victor Ioan Frunza	Nelly Merola
19	Tennessee Williams	Claudiu Goga	Virgil Moise
20	John Osborne	Radu Afrim	Livia Ante

Below the table, there's a "Download CSV" button and a note "8 rows selected.". At the bottom, it says "2023 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤ using Oracle APEX - Privacy - Terms of Use".

INSERT INTO concert VALUES (21, 'Holograf', 'Stefan Banica Jr.', 'Pop Rock');

INSERT INTO concert VALUES (22, 'Iron Maiden', 'Car Seat Headrest', 'Hard Rock');

INSERT INTO concert VALUES (23, 'Smiley', 'Liviu Teodorescu', 'Pop');

INSERT INTO concert VALUES (24, 'Vita de Vie', 'Silviu Gherman', 'Rock Alternativ');

INSERT INTO concert VALUES (25, 'Hooverphonic', 'IRIS', 'Pop');

The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with options like Home, SQL Worksheet (which is selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet". It contains the following SQL code:

```

1 INSERT INTO concert VALUES (21, 'Holograf', 'Stefan Banica Jr.', 'Pop Rock');
2 INSERT INTO concert VALUES (22, 'Iron Maiden', 'Car Seat Headrest', 'Hard Rock');
3 INSERT INTO concert VALUES (23, 'Smiley', 'Liviu Teodorescu', 'Pop');
4 INSERT INTO concert VALUES (24, 'Vita de Vie', 'Silviu Gherman', 'Rock Alternativ');
5 INSERT INTO concert VALUES (25, 'Hooverphonic', 'IRIS', 'Pop');

```

Below the code, the output shows five rows inserted:

```

1 row(s) inserted.

```

At the bottom, there's a footer with the text: "2022 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤ using Oracle APEX - Privacy - Terms of Use".

The screenshot shows the Oracle Live SQL interface. The sidebar is identical to the first one. The main area is titled "SQL Worksheet". It contains the following SQL code:

```

1 select * from concert;

```

Below the code, the results are displayed in a grid table:

ID_SPECTACOL	ARTIST	INVITATI	GEN
21	Holograf	Stefan Banica Jr.	Pop Rock
22	Iron Maiden	Car Seat Headrest	Hard Rock
23	Smiley	Liviu Teodorescu	Pop
24	Vita de Vie	Silviu Gherman	Rock Alternativ
25	Hooverphonic	IRIS	Pop

At the bottom, there's a "Download CSV" button and the message: "5 rows selected.". The footer is the same as the previous screenshot.

INSERT INTO organizator VALUES (1, 'Cornel Popescu', 'cornelpopescu@hotmail.com', '0784819518');

INSERT INTO organizator VALUES (2, 'Ionel Teodor', 'ionel_tteo@yahoo.com', '0725100212');

INSERT INTO organizator VALUES (3, 'Andrei Gilcea', 'gilcea_andrei31@gmail.com', '0774333944');

INSERT INTO organizator VALUES (4, 'Rares Pauna', 'pauna_rar3@hotmail.com', '0769834565');

INSERT INTO organizator VALUES (5, 'Cosmin Borcea', 'cosmin@borcea_events.com', '0713528122');

INSERT INTO organizator VALUES (6, 'Alina Juga', 'juga_alina@gmail.com', '0725516661');

INSERT INTO organizator VALUES (7, 'Valentin Chita', 'chita_valy93@yahoo.com', '0719696162');

INSERT INTO organizator VALUES (8, 'Constantin Avram', 'constantin@avram.com', '0777566245');

INSERT INTO organizator VALUES (9, 'Elena Avram', 'elena@avram.com', '0763375245');

INSERT INTO organizator VALUES (10, 'Ana Ifrim', 'ifrim_ana_events@gmail.com', '0771429381');

The screenshot shows the Oracle Live SQL interface. In the SQL Worksheet pane, ten INSERT statements are executed, each inserting a row into the organizator table. The results pane shows a confirmation message for each insert: "1 row(s) inserted." Below the results, a footer note states: "2022 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤ using Oracle APEX - Privacy - Terms of Use".

```

1 INSERT INTO organizator VALUES (1, 'Cornel Popescu', 'cornelpopescu@hotmail.com', '0784819518');
2 INSERT INTO organizator VALUES (2, 'Ionel Teodor', 'ionel_tteo@yahoo.com', '0725100212');
3 INSERT INTO organizator VALUES (3, 'Andrei Gilcea', 'gilcea_andrei31@gmail.com', '0774333944');
4 INSERT INTO organizator VALUES (4, 'Rares Pauna', 'pauna_rar3@hotmail.com', '0769834565');
5 INSERT INTO organizator VALUES (5, 'Cosmin Borcea', 'cosmin@borcea_events.com', '0713528122');
6 INSERT INTO organizator VALUES (6, 'Alina Juga', 'juga_alina@gmail.com', '0725516661');
7 INSERT INTO organizator VALUES (7, 'Valentin Chita', 'chita_valy93@yahoo.com', '0719696162');
8 INSERT INTO organizator VALUES (8, 'Constantin Avram', 'constantin@avram.com', '0777566245');
9 INSERT INTO organizator VALUES (9, 'Elena Avram', 'elena@avram.com', '0763375245');
10 INSERT INTO organizator VALUES (10, 'Ana Ifrim', 'ifrim_ana_events@gmail.com', '0771429381');

```

The screenshot shows the Oracle Live SQL interface. In the SQL Worksheet pane, a single SELECT * statement is executed against the organizator table. The results pane displays the 10 rows of data from the table. Below the results, a footer note states: "2023 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤ using Oracle APEX - Privacy - Terms of Use".

ID_ORGANIZATOR	NUME	EMAIL	NR_TELEFON
1	Cornel Popescu	cornelpopescu@hotmail.com	0784819518
2	Ionel Teodor	ionel_tteo@yahoo.com	0725100212
3	Andrei Gilcea	gilcea_andrei31@gmail.com	0774333944
4	Rares Pauna	pauna_rar3@hotmail.com	0769834565
5	Cosmin Borcea	cosmin@borcea_events.com	0713528122
6	Alina Juga	juga_alina@gmail.com	0725516661
7	Valentin Chita	chita_valy93@yahoo.com	0719696162
8	Constantin Avram	constantin@avram.com	0777566245
9	Elena Avram	elena@avram.com	0763375245
10	Ana Ifrim	ifrim_ana_events@gmail.com	0771429381

INSERT INTO oras VALUES (1, 'Bucuresti', 'Bucuresti');

INSERT INTO oras VALUES (2, 'Oradea', 'Bihor');

INSERT INTO oras VALUES (3, 'Arad', 'Banat');

INSERT INTO oras VALUES (4, 'Timisoara', 'Timis');

INSERT INTO oras VALUES (5, 'Craiova', 'Dolj');

INSERT INTO oras VALUES (6, 'Braila', 'Braila');

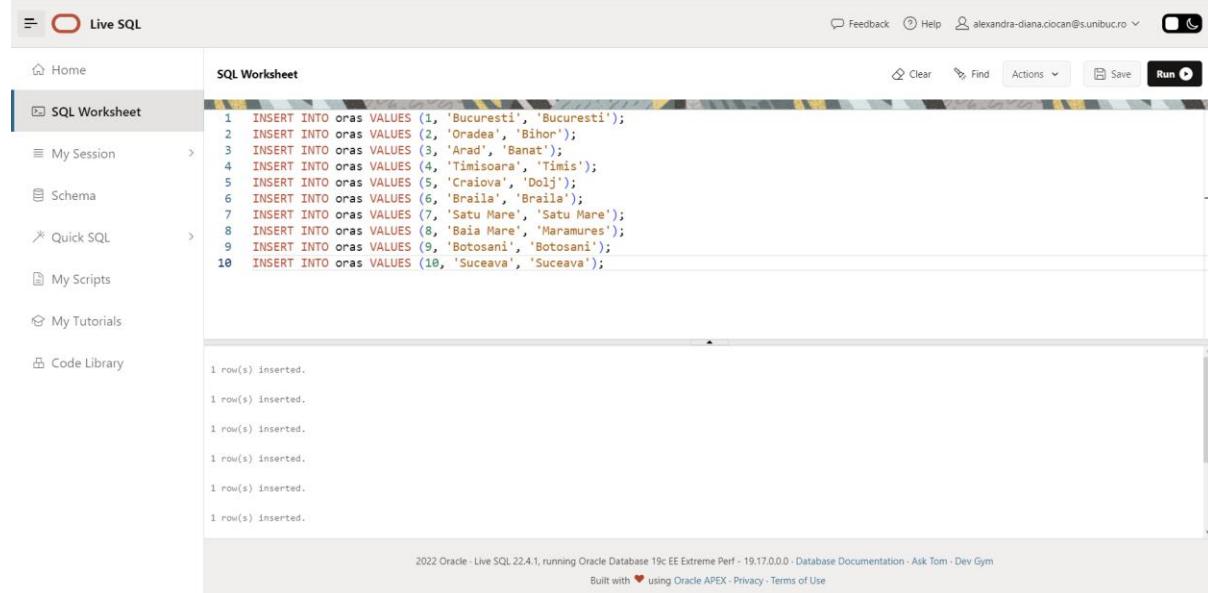
INSERT INTO oras VALUES (7, 'Satu Mare', 'Satu Mare');

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INSERT INTO oras VALUES (8, 'Baia Mare', 'Maramures');

INSERT INTO oras VALUES (9, 'Botosani', 'Botosani');

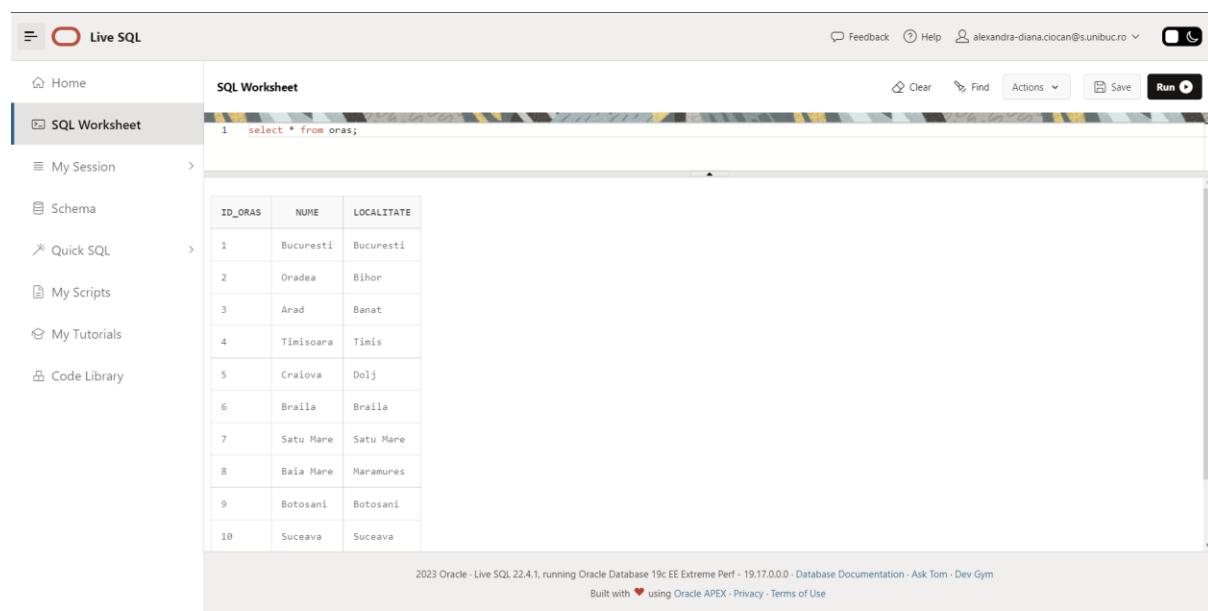
INSERT INTO oras VALUES (10, 'Suceava', 'Suceava');



The screenshot shows the Oracle Live SQL interface. The left sidebar has 'SQL Worksheet' selected. The main area displays the following SQL code:

```
1 INSERT INTO oras VALUES (1, 'Bucuresti', 'Bucuresti');
2 INSERT INTO oras VALUES (2, 'Oradea', 'Bihor');
3 INSERT INTO oras VALUES (3, 'Arad', 'Banat');
4 INSERT INTO oras VALUES (4, 'Timisoara', 'Timis');
5 INSERT INTO oras VALUES (5, 'Craiova', 'Dolj');
6 INSERT INTO oras VALUES (6, 'Braila', 'Braila');
7 INSERT INTO oras VALUES (7, 'Satu Mare', 'Satu Mare');
8 INSERT INTO oras VALUES (8, 'Baia Mare', 'Maramures');
9 INSERT INTO oras VALUES (9, 'Botosani', 'Botosani');
10 INSERT INTO oras VALUES (10, 'Suceava', 'Suceava');
```

Below the code, the output shows 10 rows inserted successfully. The footer indicates the session is running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0.



The screenshot shows the Oracle Live SQL interface. The left sidebar has 'SQL Worksheet' selected. The main area displays the following SQL code:

```
1 select * from oras;
```

Below the code, a table is displayed with the following data:

ID_ORAS	NUME	LOCALITATE
1	Bucuresti	Bucuresti
2	Oradea	Bihor
3	Arad	Banat
4	Timisoara	Timis
5	Craiova	Dolj
6	Braila	Braila
7	Satu Mare	Satu Mare
8	Baia Mare	Maramures
9	Botosani	Botosani
10	Suceava	Suceava

The footer indicates the session is running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0.

INSERT INTO locatie VALUES (1, 1, 'Great Bucharest Halls', 3, 'Str. Foisorului, 12-16');

INSERT INTO locatie VALUES (2, 2, 'Tuned@Arad', 2, 'Bd. Unirii 24');

INSERT INTO locatie VALUES (3, 3, 'Sera Cocorului', 4, 'Str. Cocorului 35');

INSERT INTO locatie VALUES (4, 4, 'Crystal Palace', 2, 'Bd. Iancu de Hendoara 120');

INSERT INTO locatie VALUES (5, 5, 'The Lions Hall', 4, 'Str. Luigi Cazzavillan 20');

INSERT INTO locatie VALUES (6, 6, 'Salile Mozaic', 3, 'Bd. Hristo Botev 93');

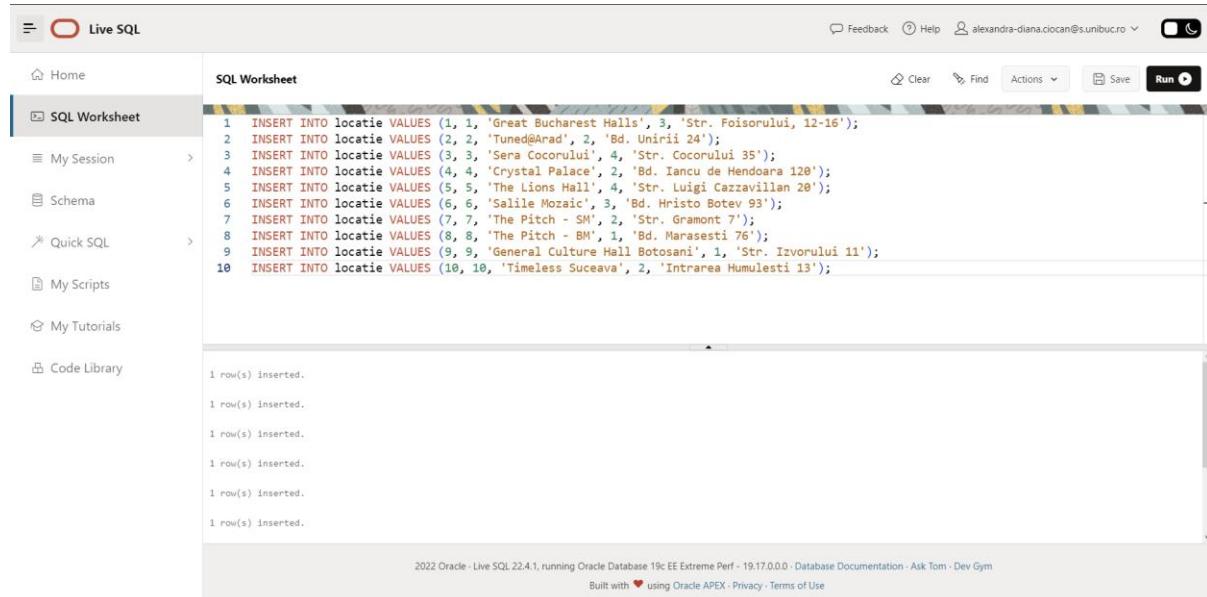
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INSERT INTO locatie VALUES (7, 7, 'The Pitch - SM', 2, 'Str. Gramont 7');

INSERT INTO locatie VALUES (8, 8, 'The Pitch - BM', 1, 'Bd. Marasesti 76');

INSERT INTO locatie VALUES (9, 9, 'General Culture Hall Botosani', 1, 'Str. Izvorului 11');

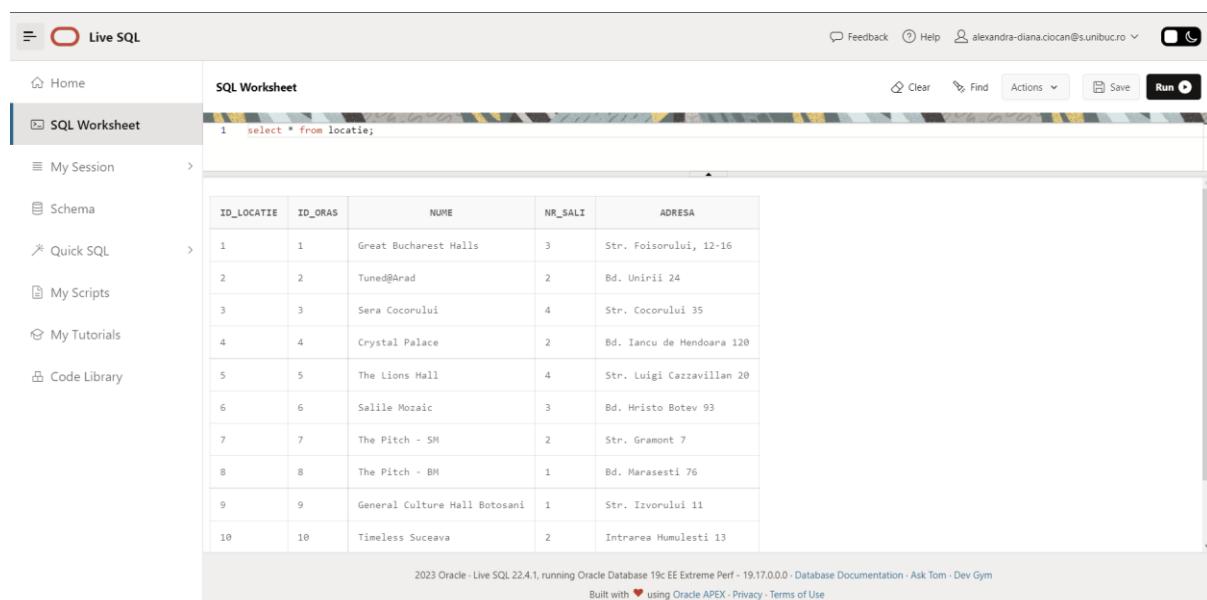
INSERT INTO locatie VALUES (10, 10, 'Timeless Suceava', 2, 'Intrarea Humulesti 13');



The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with options like Home, SQL Worksheet (which is selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet". It contains the following SQL code:

```
1 INSERT INTO locatie VALUES (1, 1, 'Great Bucharest Halls', 3, 'Str. Foișorului, 12-16');
2 INSERT INTO locatie VALUES (2, 2, 'Tuned@Arad', 2, 'Bd. Unirii 24');
3 INSERT INTO locatie VALUES (3, 3, 'Sera Cocorului', 4, 'Str. Cocorului 35');
4 INSERT INTO locatie VALUES (4, 4, 'Crystal Palace', 2, 'Bd. Iancu de Hendoza 120');
5 INSERT INTO locatie VALUES (5, 5, 'The Lions Hall', 4, 'Str. Luigi Cazzavillan 20');
6 INSERT INTO locatie VALUES (6, 6, 'Salile Mozaic', 3, 'Bd. Hristo Botev 93');
7 INSERT INTO locatie VALUES (7, 7, 'The Pitch - SM', 2, 'Str. Gramont 7');
8 INSERT INTO locatie VALUES (8, 8, 'The Pitch - BM', 1, 'Bd. Marasesti 76');
9 INSERT INTO locatie VALUES (9, 9, 'General Culture Hall Botosani', 1, 'Str. Izvorului 11');
10 INSERT INTO locatie VALUES (10, 10, 'Timeless Suceava', 2, 'Intrarea Humulesti 13');
```

Below the code, the output shows 10 rows inserted successfully. At the bottom, it says "2022 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 · Database Documentation · Ask Tom · Dev Gym" and "Built with ❤ using Oracle APEX · Privacy · Terms of Use".



The screenshot shows the Oracle Live SQL interface. The sidebar is identical to the previous one. The main area is titled "SQL Worksheet" and contains the following SQL code:

```
1 select * from locatie;
```

Below the code, a table is displayed with the following data:

ID_LOCATIE	ID_ORAS	NUME	NR_SALI	ADRESA
1	1	Great Bucharest Halls	3	Str. Foișorului, 12-16
2	2	Tuned@Arad	2	Bd. Unirii 24
3	3	Sera Cocorului	4	Str. Cocorului 35
4	4	Crystal Palace	2	Bd. Iancu de Hendoza 120
5	5	The Lions Hall	4	Str. Luigi Cazzavillan 20
6	6	Salile Mozaic	3	Bd. Hristo Botev 93
7	7	The Pitch - SM	2	Str. Gramont 7
8	8	The Pitch - BM	1	Bd. Marasesti 76
9	9	General Culture Hall Botosani	1	Str. Izvorului 11
10	10	Timeless Suceava	2	Intrarea Humulesti 13

At the bottom, it says "2023 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 · Database Documentation · Ask Tom · Dev Gym" and "Built with ❤ using Oracle APEX · Privacy · Terms of Use".

INSERT INTO sala VALUES (1, 1, 'I. L. Caragiale', 17);

INSERT INTO sala VALUES (2, 1, 'Mihai Viteazu', 10);

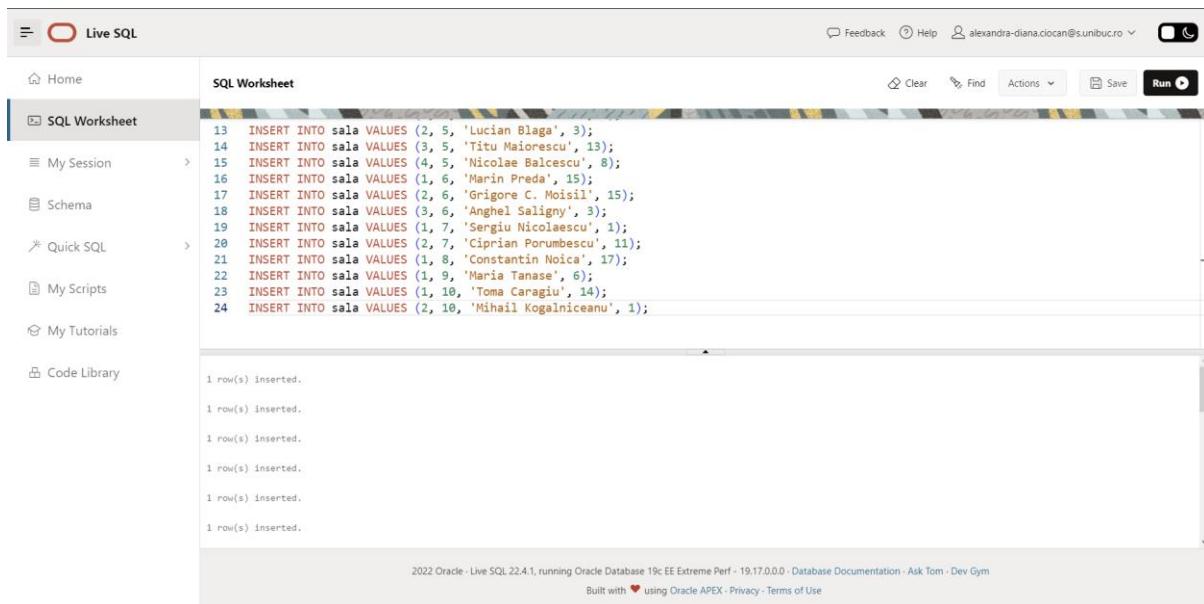
INSERT INTO sala VALUES (3, 1, 'Ion Barbu', 12);

INSERT INTO sala VALUES (1, 2, 'Claudia Boghicevici', 6);

INSERT INTO sala VALUES (2, 2, 'Constantin Brancusi', 6);

```
INSERT INTO sala VALUES (1, 3, 'Henri Coanda', 16);
INSERT INTO sala VALUES (2, 3, 'Nicolae Iorga', 6);
INSERT INTO sala VALUES (3, 3, 'George Enescu', 8);
INSERT INTO sala VALUES (4, 3, 'Ion I.C. Bratianu', 9);
INSERT INTO sala VALUES (1, 4, 'Emil Cioran', 12);
INSERT INTO sala VALUES (2, 4, 'Petre tutea', 3);
INSERT INTO sala VALUES (1, 5, 'Nichita Stănescu', 4);
INSERT INTO sala VALUES (2, 5, 'Lucian Blaga', 3);
INSERT INTO sala VALUES (3, 5, 'Titu Maiorescu', 13);
INSERT INTO sala VALUES (4, 5, 'Nicolae Balcescu', 8);
INSERT INTO sala VALUES (1, 6, 'Marin Preda', 15);
INSERT INTO sala VALUES (2, 6, 'Grigore C. Moisil', 15);
INSERT INTO sala VALUES (3, 6, 'Anghel Saligny', 3);
INSERT INTO sala VALUES (1, 7, 'Sergiu Nicolaescu', 1);
INSERT INTO sala VALUES (2, 7, 'Ciprian Porumbescu', 11);
INSERT INTO sala VALUES (1, 8, 'Constantin Noica', 17);
INSERT INTO sala VALUES (1, 9, 'Maria Tanase', 6);
INSERT INTO sala VALUES (1, 10, 'Toma Caragiu', 14);
INSERT INTO sala VALUES (2, 10, 'Mihail Kogălniceanu', 1);
```

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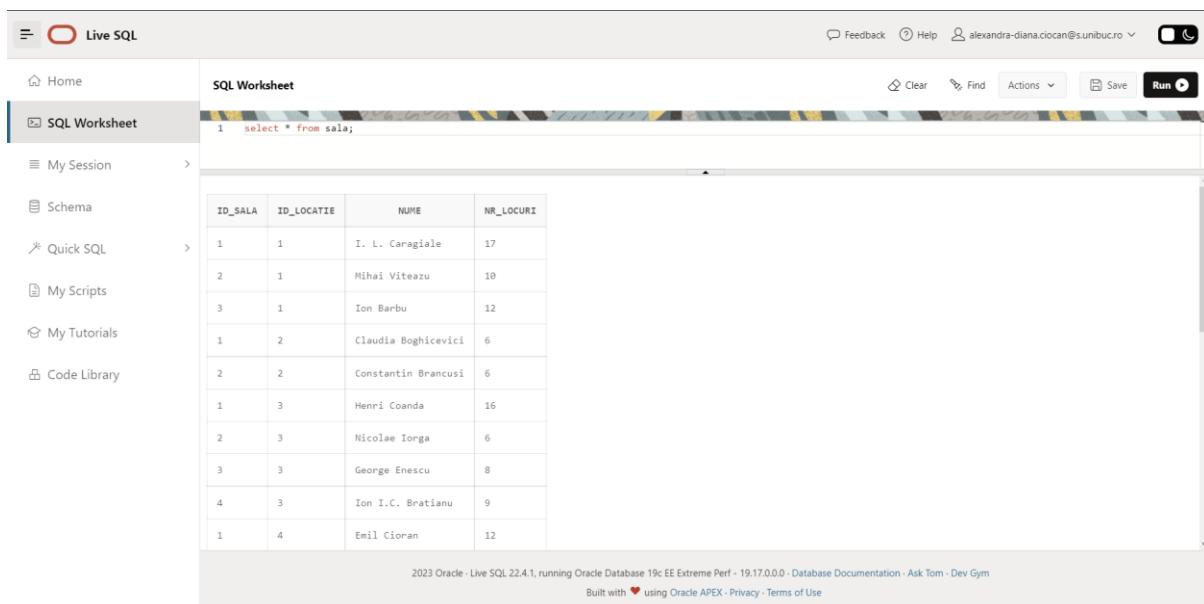
The screenshot shows the Oracle Live SQL interface. The left sidebar has a 'SQL Worksheet' tab selected. The main area displays a series of SQL INSERT statements:

```
13 INSERT INTO sala VALUES (2, 5, 'Lucian Blaga', 3);
14 INSERT INTO sala VALUES (3, 5, 'Titu Maiorescu', 13);
15 INSERT INTO sala VALUES (4, 5, 'Nicolae Balcescu', 8);
16 INSERT INTO sala VALUES (1, 6, 'Marin Preda', 15);
17 INSERT INTO sala VALUES (2, 6, 'Grigore C. Moisil', 15);
18 INSERT INTO sala VALUES (3, 6, 'Anghel Saligny', 3);
19 INSERT INTO sala VALUES (1, 7, 'Sergiu Nicolaescu', 1);
20 INSERT INTO sala VALUES (2, 7, 'Ciprian Porumbescu', 11);
21 INSERT INTO sala VALUES (1, 8, 'Constantin Noica', 17);
22 INSERT INTO sala VALUES (1, 9, 'Maria Tanase', 6);
23 INSERT INTO sala VALUES (1, 10, 'Toma Caragiu', 14);
24 INSERT INTO sala VALUES (2, 10, 'Mihail Kogalniceanu', 1);
```

Below the code, the output shows six rows inserted:

```
1 row(s) inserted.
```

At the bottom, the footer indicates: "2022 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤ using Oracle APEX - Privacy - Terms of Use".



The screenshot shows the Oracle Live SQL interface. The left sidebar has a 'SQL Worksheet' tab selected. The main area displays a single SQL query:

```
1 select * from sala;
```

Below the query, a table is shown with the following data:

ID_SALA	ID_LOCATIE	NUME	NR_LOCURI
1	1	I. L. Caragiale	17
2	1	Mihai Viteazu	10
3	1	Ion Barbu	12
1	2	Claudia Boghicevici	6
2	2	Constantin Brancusi	6
1	3	Henri Coanda	16
2	3	Nicolae Iorga	6
3	3	George Enescu	8
4	3	Ion I.C. Bratianu	9
1	4	Emil Cioran	12

At the bottom, the footer indicates: "2023 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤ using Oracle APEX - Privacy - Terms of Use".

INSERT INTO loc VALUES (1, 1, 1, 'sala');

INSERT INTO loc VALUES (2, 1, 1, 'sala');

INSERT INTO loc VALUES (3, 1, 1, 'sala');

INSERT INTO loc VALUES (4, 1, 1, 'sala');

INSERT INTO loc VALUES (5, 1, 1, 'sala');

INSERT INTO loc VALUES (6, 1, 1, 'sala');

INSERT INTO loc VALUES (7, 1, 1, 'sala');

INSERT INTO loc VALUES (8, 1, 1, 'sala');

INSERT INTO loc VALUES (9, 1, 1, 'loja');

```
INSERT INTO loc VALUES (10, 1, 1, 'loja');

INSERT INTO loc VALUES (11, 1, 1, 'loja');

INSERT INTO loc VALUES (12, 1, 1, 'loja');

INSERT INTO loc VALUES (13, 1, 1, 'loja');

INSERT INTO loc VALUES (14, 1, 1, 'loja');

INSERT INTO loc VALUES (15, 1, 1, 'loja');

INSERT INTO loc VALUES (16, 1, 1, 'loja');

INSERT INTO loc VALUES (17, 1, 1, 'loja');

INSERT INTO loc VALUES (1, 2, 1, 'sala');

INSERT INTO loc VALUES (2, 2, 1, 'sala');

INSERT INTO loc VALUES (3, 2, 1, 'sala');

INSERT INTO loc VALUES (4, 2, 1, 'sala');

INSERT INTO loc VALUES (5, 2, 1, 'sala');

INSERT INTO loc VALUES (6, 2, 1, 'sala');

INSERT INTO loc VALUES (7, 2, 1, 'sala');

INSERT INTO loc VALUES (8, 2, 1, 'sala');

INSERT INTO loc VALUES (9, 2, 1, 'sala');

INSERT INTO loc VALUES (10, 2, 1, 'sala');

INSERT INTO loc VALUES (1, 3, 1, 'sala');

INSERT INTO loc VALUES (2, 3, 1, 'sala');

INSERT INTO loc VALUES (3, 3, 1, 'sala');

INSERT INTO loc VALUES (4, 3, 1, 'sala');

INSERT INTO loc VALUES (5, 3, 1, 'sala');

INSERT INTO loc VALUES (6, 3, 1, 'sala');

INSERT INTO loc VALUES (7, 3, 1, 'sala');

INSERT INTO loc VALUES (8, 3, 1, 'loja');

INSERT INTO loc VALUES (9, 3, 1, 'loja');
```

```
INSERT INTO loc VALUES (10, 3, 1, 'loja');

INSERT INTO loc VALUES (11, 3, 1, 'loja');

INSERT INTO loc VALUES (12, 3, 1, 'loja');

INSERT INTO loc VALUES (1, 1, 2, 'normal');

INSERT INTO loc VALUES (2, 1, 2, 'normal');

INSERT INTO loc VALUES (3, 1, 2, 'normal');

INSERT INTO loc VALUES (4, 1, 2, 'normal');

INSERT INTO loc VALUES (5, 1, 2, 'normal');

INSERT INTO loc VALUES (6, 1, 2, 'normal');

INSERT INTO loc VALUES (1, 2, 2, 'loja');

INSERT INTO loc VALUES (2, 2, 2, 'loja');

INSERT INTO loc VALUES (3, 2, 2, 'loja');

INSERT INTO loc VALUES (4, 2, 2, 'loja');

INSERT INTO loc VALUES (5, 2, 2, 'loja');

INSERT INTO loc VALUES (6, 2, 2, 'loja');

INSERT INTO loc VALUES (1, 1, 3, 'loja');

INSERT INTO loc VALUES (2, 1, 3, 'loja');

INSERT INTO loc VALUES (3, 1, 3, 'loja');

INSERT INTO loc VALUES (4, 1, 3, 'loja');

INSERT INTO loc VALUES (5, 1, 3, 'loja');

INSERT INTO loc VALUES (6, 1, 3, 'loja');

INSERT INTO loc VALUES (7, 1, 3, 'loja');

INSERT INTO loc VALUES (8, 1, 3, 'sala');

INSERT INTO loc VALUES (9, 1, 3, 'sala');

INSERT INTO loc VALUES (10, 1, 3, 'sala');

INSERT INTO loc VALUES (11, 1, 3, 'sala');

INSERT INTO loc VALUES (12, 1, 3, 'sala');
```

```
INSERT INTO loc VALUES (13, 1, 3, 'sala');

INSERT INTO loc VALUES (14, 1, 3, 'sala');

INSERT INTO loc VALUES (15, 1, 3, 'sala');

INSERT INTO loc VALUES (16, 1, 3, 'sala');

INSERT INTO loc VALUES (1, 2, 3, 'normal');

INSERT INTO loc VALUES (2, 2, 3, 'normal');

INSERT INTO loc VALUES (3, 2, 3, 'normal');

INSERT INTO loc VALUES (4, 2, 3, 'normal');

INSERT INTO loc VALUES (5, 2, 3, 'normal');

INSERT INTO loc VALUES (6, 2, 3, 'normal');

INSERT INTO loc VALUES (1, 3, 3, 'normal');

INSERT INTO loc VALUES (2, 3, 3, 'normal');

INSERT INTO loc VALUES (3, 3, 3, 'normal');

INSERT INTO loc VALUES (4, 3, 3, 'normal');

INSERT INTO loc VALUES (5, 3, 3, 'normal');

INSERT INTO loc VALUES (6, 3, 3, 'normal');

INSERT INTO loc VALUES (7, 3, 3, 'normal');

INSERT INTO loc VALUES (8, 3, 3, 'normal');

INSERT INTO loc VALUES (1, 4, 3, 'normal');

INSERT INTO loc VALUES (2, 4, 3, 'normal');

INSERT INTO loc VALUES (3, 4, 3, 'normal');

INSERT INTO loc VALUES (4, 4, 3, 'normal');

INSERT INTO loc VALUES (5, 4, 3, 'normal');

INSERT INTO loc VALUES (6, 4, 3, 'normal');

INSERT INTO loc VALUES (7, 4, 3, 'normal');

INSERT INTO loc VALUES (8, 4, 3, 'normal');

INSERT INTO loc VALUES (9, 4, 3, 'normal');
```

```
INSERT INTO loc VALUES (1, 1, 4, 'normal');

INSERT INTO loc VALUES (2, 1, 4, 'normal');

INSERT INTO loc VALUES (3, 1, 4, 'normal');

INSERT INTO loc VALUES (4, 1, 4, 'normal');

INSERT INTO loc VALUES (5, 1, 4, 'normal');

INSERT INTO loc VALUES (6, 1, 4, 'normal');

INSERT INTO loc VALUES (7, 1, 4, 'normal');

INSERT INTO loc VALUES (8, 1, 4, 'normal');

INSERT INTO loc VALUES (9, 1, 4, 'normal');

INSERT INTO loc VALUES (10, 1, 4, 'normal');

INSERT INTO loc VALUES (11, 1, 4, 'normal');

INSERT INTO loc VALUES (12, 1, 4, 'normal');

INSERT INTO loc VALUES (1, 2, 4, 'normal');

INSERT INTO loc VALUES (2, 2, 4, 'normal');

INSERT INTO loc VALUES (3, 2, 4, 'normal');

INSERT INTO loc VALUES (1, 1, 5, 'sala');

INSERT INTO loc VALUES (2, 1, 5, 'sala');

INSERT INTO loc VALUES (3, 1, 5, 'sala');

INSERT INTO loc VALUES (4, 1, 5, 'sala');

INSERT INTO loc VALUES (1, 2, 5, 'sala');

INSERT INTO loc VALUES (2, 2, 5, 'sala');

INSERT INTO loc VALUES (3, 2, 5, 'sala');

INSERT INTO loc VALUES (1, 3, 5, 'sala');

INSERT INTO loc VALUES (2, 3, 5, 'sala');

INSERT INTO loc VALUES (3, 3, 5, 'sala');

INSERT INTO loc VALUES (4, 3, 5, 'sala');

INSERT INTO loc VALUES (5, 3, 5, 'sala');
```

```
INSERT INTO loc VALUES (6, 3, 5, 'sala');

INSERT INTO loc VALUES (7, 3, 5, 'sala');

INSERT INTO loc VALUES (8, 3, 5, 'sala');

INSERT INTO loc VALUES (9, 3, 5, 'sala');

INSERT INTO loc VALUES (10, 3, 5, 'sala');

INSERT INTO loc VALUES (11, 3, 5, 'sala');

INSERT INTO loc VALUES (12, 3, 5, 'sala');

INSERT INTO loc VALUES (13, 3, 5, 'sala');

INSERT INTO loc VALUES (1, 4, 5, 'loja');

INSERT INTO loc VALUES (2, 4, 5, 'loja');

INSERT INTO loc VALUES (3, 4, 5, 'loja');

INSERT INTO loc VALUES (4, 4, 5, 'loja');

INSERT INTO loc VALUES (5, 4, 5, 'loja');

INSERT INTO loc VALUES (6, 4, 5, 'loja');

INSERT INTO loc VALUES (7, 4, 5, 'loja');

INSERT INTO loc VALUES (8, 4, 5, 'loja');

INSERT INTO loc VALUES (1, 1, 6, 'loja');

INSERT INTO loc VALUES (2, 1, 6, 'loja');

INSERT INTO loc VALUES (3, 1, 6, 'loja');

INSERT INTO loc VALUES (4, 1, 6, 'loja');

INSERT INTO loc VALUES (5, 1, 6, 'loja');

INSERT INTO loc VALUES (6, 1, 6, 'loja');

INSERT INTO loc VALUES (7, 1, 6, 'loja');

INSERT INTO loc VALUES (8, 1, 6, 'loja');

INSERT INTO loc VALUES (9, 1, 6, 'loja');

INSERT INTO loc VALUES (10, 1, 6, 'loja');

INSERT INTO loc VALUES (11, 1, 6, 'loja');
```

```
INSERT INTO loc VALUES (12, 1, 6, 'loja');

INSERT INTO loc VALUES (13, 1, 6, 'loja');

INSERT INTO loc VALUES (14, 1, 6, 'loja');

INSERT INTO loc VALUES (15, 1, 6, 'loja');

INSERT INTO loc VALUES (1, 2, 6, 'normal');

INSERT INTO loc VALUES (2, 2, 6, 'normal');

INSERT INTO loc VALUES (3, 2, 6, 'normal');

INSERT INTO loc VALUES (4, 2, 6, 'normal');

INSERT INTO loc VALUES (5, 2, 6, 'normal');

INSERT INTO loc VALUES (6, 2, 6, 'normal');

INSERT INTO loc VALUES (7, 2, 6, 'normal');

INSERT INTO loc VALUES (8, 2, 6, 'normal');

INSERT INTO loc VALUES (9, 2, 6, 'normal');

INSERT INTO loc VALUES (10, 2, 6, 'normal');

INSERT INTO loc VALUES (11, 2, 6, 'normal');

INSERT INTO loc VALUES (12, 2, 6, 'normal');

INSERT INTO loc VALUES (13, 2, 6, 'normal');

INSERT INTO loc VALUES (14, 2, 6, 'normal');

INSERT INTO loc VALUES (15, 2, 6, 'normal');

INSERT INTO loc VALUES (1, 3, 6, 'sala');

INSERT INTO loc VALUES (2, 3, 6, 'sala');

INSERT INTO loc VALUES (3, 3, 6, 'sala');

INSERT INTO loc VALUES (1, 1, 7, 'sala');

INSERT INTO loc VALUES (1, 2, 7, 'sala');

INSERT INTO loc VALUES (2, 2, 7, 'sala');

INSERT INTO loc VALUES (3, 2, 7, 'sala');

INSERT INTO loc VALUES (4, 2, 7, 'sala');
```

```
INSERT INTO loc VALUES (5, 2, 7, 'sala');

INSERT INTO loc VALUES (6, 2, 7, 'sala');

INSERT INTO loc VALUES (7, 2, 7, 'sala');

INSERT INTO loc VALUES (8, 2, 7, 'sala');

INSERT INTO loc VALUES (9, 2, 7, 'sala');

INSERT INTO loc VALUES (10, 2, 7, 'sala');

INSERT INTO loc VALUES (11, 2, 7, 'sala');

INSERT INTO loc VALUES (1, 1, 8, 'loja');

INSERT INTO loc VALUES (2, 1, 8, 'loja');

INSERT INTO loc VALUES (3, 1, 8, 'loja');

INSERT INTO loc VALUES (4, 1, 8, 'loja');

INSERT INTO loc VALUES (5, 1, 8, 'loja');

INSERT INTO loc VALUES (6, 1, 8, 'loja');

INSERT INTO loc VALUES (7, 1, 8, 'loja');

INSERT INTO loc VALUES (8, 1, 8, 'loja');

INSERT INTO loc VALUES (9, 1, 8, 'loja');

INSERT INTO loc VALUES (10, 1, 8, 'loja');

INSERT INTO loc VALUES (11, 1, 8, 'loja');

INSERT INTO loc VALUES (12, 1, 8, 'loja');

INSERT INTO loc VALUES (13, 1, 8, 'loja');

INSERT INTO loc VALUES (14, 1, 8, 'loja');

INSERT INTO loc VALUES (15, 1, 8, 'loja');

INSERT INTO loc VALUES (16, 1, 8, 'loja');

INSERT INTO loc VALUES (17, 1, 8, 'loja');

INSERT INTO loc VALUES (1, 1, 9, 'vip');

INSERT INTO loc VALUES (2, 1, 9, 'vip');

INSERT INTO loc VALUES (3, 1, 9, 'vip');
```

```
INSERT INTO loc VALUES (4, 1, 9, 'vip');
```

```
INSERT INTO loc VALUES (5, 1, 9, 'vip');
```

```
INSERT INTO loc VALUES (6, 1, 9, 'vip');
```

```
INSERT INTO loc VALUES (1, 1, 10, 'vip');
```

```
INSERT INTO loc VALUES (2, 1, 10, 'vip');
```

```
INSERT INTO loc VALUES (3, 1, 10, 'vip');
```

```
INSERT INTO loc VALUES (4, 1, 10, 'vip');
```

```
INSERT INTO loc VALUES (5, 1, 10, 'vip');
```

```
INSERT INTO loc VALUES (6, 1, 10, 'vip');
```

```
INSERT INTO loc VALUES (7, 1, 10, 'vip');
```

```
INSERT INTO loc VALUES (8, 1, 10, 'vip');
```

```
INSERT INTO loc VALUES (9, 1, 10, 'vip');
```

```
INSERT INTO loc VALUES (10, 1, 10, 'vip');
```

The screenshot shows the Oracle Live SQL interface. The left sidebar has a tree view with 'SQL Worksheet' selected. The main area is titled 'SQL Worksheet' and contains the following code:

```
198 INSERT INTO loc VALUES (3, 1, 9, 'vip');
199 INSERT INTO loc VALUES (4, 1, 9, 'vip');
200 INSERT INTO loc VALUES (5, 1, 9, 'vip');
201 INSERT INTO loc VALUES (6, 1, 9, 'vip');
202 INSERT INTO loc VALUES (1, 1, 10, 'vip');
203 INSERT INTO loc VALUES (2, 1, 10, 'vip');
204 INSERT INTO loc VALUES (3, 1, 10, 'vip');
205 INSERT INTO loc VALUES (4, 1, 10, 'vip');
206 INSERT INTO loc VALUES (5, 1, 10, 'vip');
207 INSERT INTO loc VALUES (6, 1, 10, 'vip');
208 INSERT INTO loc VALUES (7, 1, 10, 'vip');
209 INSERT INTO loc VALUES (8, 1, 10, 'vip');
210 INSERT INTO loc VALUES (9, 1, 10, 'vip');
211 INSERT INTO loc VALUES (10, 1, 10, 'vip');
```

Below the code, the output shows 10 rows inserted successfully:

```
1 row(s) inserted.
```

At the bottom, there is footer text: "2022 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤ using Oracle APEX - Privacy - Terms of Use".

ID_LOC	ID_SALA	ID_LOCATIE	TIP
1	1	1	sala
2	1	1	sala
3	1	1	sala
4	1	1	sala
5	1	1	sala
6	1	1	sala
7	1	1	sala
8	1	1	sala
9	1	1	loja
10	1	1	loja

```
INSERT INTO eveniment VALUES (1, 9, 7, 1, 9, to_date('2022-12-23', 'yyyy-mm-dd'), '19:30', '21:00');

INSERT INTO eveniment VALUES (2, 5, 8, 1, 5, to_date('2022-07-01', 'yyyy-mm-dd'), '17:00', '19:30');

INSERT INTO eveniment VALUES (3, 7, 4, 2, 7, to_date('2022-08-06', 'yyyy-mm-dd'), '14:30', '17:30');

INSERT INTO eveniment VALUES (4, 25, 9, 1, 5, to_date('2022-08-13', 'yyyy-mm-dd'), '16:15', '19:00');

INSERT INTO eveniment VALUES (5, 7, 8, 1, 7, to_date('2022-10-28', 'yyyy-mm-dd'), '13:00', '15:00');

INSERT INTO eveniment VALUES (6, 10, 2, 2, 10, to_date('2022-07-03', 'yyyy-mm-dd'), '18:00', '20:30');

INSERT INTO eveniment VALUES (7, 10, 9, 1, 10, to_date('2022-08-24', 'yyyy-mm-dd'), '12:00', '16:00');

INSERT INTO eveniment VALUES (8, 12, 5, 1, 2, to_date('2022-06-29', 'yyyy-mm-dd'), '13:00', '15:00');

INSERT INTO eveniment VALUES (9, 20, 7, 2, 10, to_date('2022-10-04', 'yyyy-mm-dd'), '19:15', '21:15');

INSERT INTO eveniment VALUES (10, 21, 4, 2, 1, to_date('2022-08-11', 'yyyy-mm-dd'), '20:00', '22:30');

INSERT INTO eveniment VALUES (11, 14, 1, 3, 4, to_date('2022-10-24', 'yyyy-mm-dd'), '21:00', '23:00');

INSERT INTO eveniment VALUES (12, 15, 7, 2, 5, to_date('2022-10-25', 'yyyy-mm-dd'), '20:30', '23:30');

INSERT INTO eveniment VALUES (13, 15, 6, 2, 5, to_date('2022-10-16', 'yyyy-mm-dd'), '17:00', '20:00');

INSERT INTO eveniment VALUES (14, 1, 8, 1, 1, to_date('2022-09-21', 'yyyy-mm-dd'), '13:45', '16:00');
```

```
INSERT INTO eveniment VALUES (15, 19, 9, 1, 9, to_date('2022-10-24', 'yyyy-mm-dd'), '16:30', '18:30');

INSERT INTO eveniment VALUES (16, 2, 7, 2, 2, to_date('2022-12-04', 'yyyy-mm-dd'), '18:30', '21:00');

INSERT INTO eveniment VALUES (17, 20, 1, 1, 10, to_date('2022-06-19', 'yyyy-mm-dd'), '19:00', '21:30');

INSERT INTO eveniment VALUES (18, 15, 2, 2, 5, to_date('2022-09-15', 'yyyy-mm-dd'), '15:30', '17:00');

INSERT INTO eveniment VALUES (19, 22, 7, 1, 2, to_date('2022-09-27', 'yyyy-mm-dd'), '21:15', '23:30');

INSERT INTO eveniment VALUES (20, 12, 1, 3, 2, to_date('2022-08-13', 'yyyy-mm-dd'), '19:15', '22:45');

INSERT INTO eveniment VALUES (21, 5, 4, 2, 5, to_date('2022-06-10', 'yyyy-mm-dd'), '18:00', '20:15');

INSERT INTO eveniment VALUES (22, 1, 4, 1, 1, to_date('2022-08-10', 'yyyy-mm-dd'), '14:30', '16:00');

INSERT INTO eveniment VALUES (23, 21, 1, 2, 1, to_date('2022-12-22', 'yyyy-mm-dd'), '11:30', '13:30');

INSERT INTO eveniment VALUES (24, 16, 6, 3, 6, to_date('2022-08-21', 'yyyy-mm-dd'), '15:00', '17:30');

INSERT INTO eveniment VALUES (25, 12, 4, 2, 2, to_date('2022-11-24', 'yyyy-mm-dd'), '21:15', '23:30');

INSERT INTO eveniment VALUES (26, 6, 8, 1, 6, to_date('2022-07-02', 'yyyy-mm-dd'), '16:35', '19:45');

INSERT INTO eveniment VALUES (27, 13, 7, 2, 3, to_date('2022-08-30', 'yyyy-mm-dd'), '17:50', '20:15');

INSERT INTO eveniment VALUES (28, 6, 5, 2, 6, to_date('2022-11-04', 'yyyy-mm-dd'), '18:30', '21:00');

INSERT INTO eveniment VALUES (29, 4, 9, 1, 4, to_date('2022-11-02', 'yyyy-mm-dd'), '13:30', '15:45');

INSERT INTO eveniment VALUES (30, 8, 8, 1, 8, to_date('2022-11-25', 'yyyy-mm-dd'), '23:30', '02:00');

INSERT INTO eveniment VALUES (31, 5, 7, 1, 5, to_date('2022-08-13', 'yyyy-mm-dd'), '14:00', '16:00');

INSERT INTO eveniment VALUES (32, 20, 6, 1, 10, to_date('2022-06-23', 'yyyy-mm-dd'), '20:30', '22:15');

INSERT INTO eveniment VALUES (33, 14, 8, 1, 4, to_date('2022-06-24', 'yyyy-mm-dd'), '15:30', '17:30');

INSERT INTO eveniment VALUES (34, 23, 1, 2, 3, to_date('2022-09-19', 'yyyy-mm-dd'), '19:30', '22:00');
```

```
INSERT INTO eveniment VALUES (35, 16, 5, 4, 6, to_date('2022-12-12', 'yyyy-mm-dd'), '14:15', '16:30');
```

```
INSERT INTO eveniment VALUES (36, 1, 4, 2, 1, to_date('2022-07-22', 'yyyy-mm-dd'), '18:00', '20:15');
```

```
INSERT INTO eveniment VALUES (37, 14, 3, 4, 4, to_date('2022-08-22', 'yyyy-mm-dd'), '21:30', '00:00');
```

```
INSERT INTO eveniment VALUES (38, 8, 10, 2, 8, to_date('2022-08-20', 'yyyy-mm-dd'), '20:00', '22:30');
```

```
INSERT INTO eveniment VALUES (39, 14, 3, 3, 4, to_date('2022-10-31', 'yyyy-mm-dd'), '16:00', '18:15');
```

```
INSERT INTO eveniment VALUES (40, 15, 8, 1, 5, to_date('1899-12-30', 'yyyy-mm-dd'), '17:30', '19:45');
```

The screenshot shows the Oracle Live SQL interface with a sidebar containing navigation links like Home, My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet" and contains a scrollable list of 40 SQL statements, each starting with "INSERT INTO eveniment VALUES". The statements involve various date and time values. Below the list, a message indicates "1 row(s) inserted." repeated 40 times. At the bottom of the worksheet, a footer bar includes links for Feedback, Help, and a user email (alexandra-diana.ciocan@s.unibuc.ro). A "Run" button is also present.

The screenshot shows the Oracle Live SQL interface with a sidebar containing navigation links like Home, My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet" and contains a single line of SQL: "1 select * from eveniment;". Below the query, a table is displayed with 10 rows of data. The columns are labeled: ID_EVENTIMENT, ID_SPECTACOL, ID_LOCATIE, ID_SALA, ID_ORGANIZATOR, DATA_EVENTIMENT, ORA_START, and ORA_STOP. The data entries correspond to the rows inserted in the previous screenshot. At the bottom of the worksheet, a footer bar includes links for Feedback, Help, and a user email (alexandra-diana.ciocan@s.unibuc.ro). A "Run" button is also present.

ID_EVENTIMENT	ID_SPECTACOL	ID_LOCATIE	ID_SALA	ID_ORGANIZATOR	DATA_EVENTIMENT	ORA_START	ORA_STOP
1	9	7	1	9	23-DEC-22	19:30	21:00
2	5	8	1	5	01-JUL-22	17:00	19:30
3	7	4	2	7	06-AUG-22	14:30	17:30
4	25	9	1	5	13-AUG-22	16:15	19:00
5	7	8	1	7	28-OCT-22	13:00	15:00
6	10	2	2	10	03-JUL-22	18:00	20:30
7	10	9	1	10	24-AUG-22	12:00	16:00
8	12	5	1	2	29-JUN-22	13:00	15:00
9	20	7	2	10	04-OCT-22	19:15	21:15
10	21	4	2	1	11-AUG-22	20:00	22:30

```
INSERT INTO utilizator VALUES (secv_utilizator.nextval, 'Lungu David', 'sfdsreds!2313', 'lungudavid@gmail.com', '0753296131');
```

```
INSERT INTO utilizator VALUES (secv_utilizator.nextval, 'Birsan Constantin', 'wdsagreds3', 'birsanconstantin@hotmail.com', '0793884781');
```

```
INSERT INTO utilizator VALUES (secv_utilizator.nextval, 'Bancescu Alexandru', '432r3trefds', 'bancescu_alex202@yahoo.com', '0729790379');
```

```
INSERT INTO utilizator VALUES (secv_utilizator.nextval, 'Dinica Andrei', 'frggew4', 'andreidini_ca4392@hotmail.com', '0710448446');
```

```
INSERT INTO utilizator VALUES (secv_utilizator.nextval, 'Surdu Robert', 'sadbhy5t', 'bob_ia@gmail.com', '0771271926');
```

```
INSERT INTO utilizator VALUES (secv_utilizator.nextval, 'Marian Cocos', 'mk7i5u6yr5etr', 'maarian__@hotmail.com', '0706377531');
```

```
INSERT INTO utilizator VALUES (secv_utilizator.nextval, 'Ungureanu Cristian', 'kie3jhr24', 'cristian_342_ed@gmail.com', '0702498499');
```

The screenshot shows the Oracle Live SQL interface. The left sidebar includes links for Home, SQL Worksheet (which is selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet" and contains the following SQL code:

```
1 INSERT INTO utilizator VALUES (secv_utilizator.nextval, 'Lungu David', 'sfdsreds!2313', 'lungudavid@gmail.com', '0753296131');
2 INSERT INTO utilizator VALUES (secv_utilizator.nextval, 'Birsan Constantin', 'wdsagreds3', 'birsanconstantin@hotmail.com', '0793884781');
3 INSERT INTO utilizator VALUES (secv_utilizator.nextval, 'Bancescu Alexandru', '432r3trefds', 'bancescu_alex202@yahoo.com', '0729790379');
4 INSERT INTO utilizator VALUES (secv_utilizator.nextval, 'Dinica Andrei', 'frggew4', 'andreidini_ca4392@hotmail.com', '0710448446');
5 INSERT INTO utilizator VALUES (secv_utilizator.nextval, 'Surdu Robert', 'sadbhy5t', 'bob_ia@gmail.com', '0771271926');
6 INSERT INTO utilizator VALUES (secv_utilizator.nextval, 'Marian Cocos', 'mk7i5u6yr5etr', 'maarian__@hotmail.com', '0706377531');
7 INSERT INTO utilizator VALUES (secv_utilizator.nextval, 'Ungureanu Cristian', 'kie3jhr24', 'cristian_342_ed@gmail.com', '0702498499');
```

The output window below shows the results of the insertions:

```
1 row(s) inserted.
```

At the bottom, a footer bar indicates: 2022 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym. Built with ❤️ using Oracle APEX - Privacy - Terms of Use.

The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with options like Home, SQL Worksheet (which is selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet" and contains a code editor with the following SQL query:

```
1 select * from utilizator;
```

Below the code editor is a table with the following data:

ID_UTILIZATOR	NUME	PAROLA	EMAIL	NR_TELEFON
1	Lungu David	sfdstsred12313	lungudavid@gmail.com	0753296131
2	Birsan Constantin	wdsagreds3	birsanconstantin@hotmail.com	0793884781
3	Bancescu Alexandru	432r3trefds	bancescu_alex202@yahoo.com	0729790379
4	Dinica Andrei	frggew4	andreidini_ca4392@hotmail.com	0710448446
5	Surdu Robert	sadbhy5t	bob_ia@gmail.com	0771271926
6	Marian Cocos	mk715u6yr5etr	maarian__@hotmail.com	0706377531
7	Ungureanu Cristian	kie3jhr24	cristian_342_ed@gmail.com	0702498499

At the bottom of the interface, there are buttons for "Download CSV" and copyright information: "2023 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤ using Oracle APEX - Privacy - Terms of Use".

-- pentru rezervări, starea este exprimată după convenția: 0 = neplătită, 1 = plătită

```
INSERT INTO rezervare VALUES (1, 4, to_date('2022-07-01', 'yyyy-mm-dd'), 2, 1);
```

```
INSERT INTO rezervare VALUES (2, 6, to_date('2022-07-03', 'yyyy-mm-dd'), 5, 1);
```

```
INSERT INTO rezervare VALUES (3, 3, to_date('2022-08-06', 'yyyy-mm-dd'), 3, 1);
```

```
INSERT INTO rezervare VALUES (4, 2, to_date('2022-08-24', 'yyyy-mm-dd'), 1, 0);
```

```
INSERT INTO rezervare VALUES (5, 6, to_date('2022-10-25', 'yyyy-mm-dd'), 2, 0);
```

```
INSERT INTO rezervare VALUES (6, 6, to_date('2022-09-21', 'yyyy-mm-dd'), 3, 1);
```

```
INSERT INTO rezervare VALUES (7, 3, to_date('2022-06-10', 'yyyy-mm-dd'), 1, 0);
```

```
INSERT INTO rezervare VALUES (8, 2, to_date('2022-06-19', 'yyyy-mm-dd'), 2, 1);
```

```
INSERT INTO rezervare VALUES (9, 4, to_date('2022-09-27', 'yyyy-mm-dd'), 3, 0);
```

```
INSERT INTO rezervare VALUES (10, 2, to_date('2022-08-21', 'yyyy-mm-dd'), 1, 1);
```

```
INSERT INTO rezervare VALUES (11, 3, to_date('2022-08-24', 'yyyy-mm-dd'), 1, 1);
```

The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with navigation links: Home, SQL Worksheet (which is selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet". It contains the following SQL code:

```

1 INSERT INTO rezervare VALUES (1, 4, to_date('2022-07-01', 'yyyy-mm-dd'), 2, 1);
2 INSERT INTO rezervare VALUES (2, 6, to_date('2022-07-03', 'yyyy-mm-dd'), 5, 1);
3 INSERT INTO rezervare VALUES (3, 3, to_date('2022-08-06', 'yyyy-mm-dd'), 3, 1);
4 INSERT INTO rezervare VALUES (4, 2, to_date('2022-08-24', 'yyyy-mm-dd'), 1, 0);
5 INSERT INTO rezervare VALUES (5, 6, to_date('2022-10-25', 'yyyy-mm-dd'), 2, 0);
6 INSERT INTO rezervare VALUES (6, 6, to_date('2022-09-21', 'yyyy-mm-dd'), 3, 1);
7 INSERT INTO rezervare VALUES (7, 3, to_date('2022-06-18', 'yyyy-mm-dd'), 1, 0);
8 INSERT INTO rezervare VALUES (8, 2, to_date('2022-06-19', 'yyyy-mm-dd'), 2, 1);
9 INSERT INTO rezervare VALUES (9, 4, to_date('2022-09-27', 'yyyy-mm-dd'), 3, 0);
10 INSERT INTO rezervare VALUES (10, 2, to_date('2022-06-21', 'yyyy-mm-dd'), 1, 1);
11 INSERT INTO rezervare VALUES (11, 3, to_date('2022-08-24', 'yyyy-mm-dd'), 1, 1);

```

Below the code, the output shows 11 rows inserted. At the bottom, there's a footer with copyright information.

The screenshot shows the Oracle Live SQL interface. The sidebar is identical to the first one. The main area is titled "SQL Worksheet". It contains the following SQL code:

```

1 select * from rezervare;

```

Below the code, a table displays the results of the query. The columns are: ID_REZERVARE, ID_UTILIZATOR, DATA_REZERVARE, NR_BILETE, and STARE. The data is as follows:

ID_REZERVARE	ID_UTILIZATOR	DATA_REZERVARE	NR_BILETE	STARE
1	4	01-JUL-22	2	1
2	6	03-JUL-22	5	1
3	3	06-AUG-22	3	1
4	2	24-AUG-22	1	0
5	6	25-OCT-22	2	0
6	6	21-SEP-22	3	1
7	3	10-JUN-22	1	0
8	2	19-JUN-22	2	1
9	4	27-SEP-22	3	0
10	2	21-AUG-22	1	1

At the bottom, there's a footer with copyright information.

INSERT INTO reducere VALUES (1, 'Student', 50);

INSERT INTO reducere VALUES (2, 'Pensionar', 50);

INSERT INTO reducere VALUES (3, 'Angajat', 35);

INSERT INTO reducere VALUES (4, 'Donator sange', 40);

INSERT INTO reducere VALUES (5, 'Elev', 25);

The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with options like Home, SQL Worksheet (which is selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet". It contains the following SQL code:

```

1 INSERT INTO reducere VALUES (1, 'Student', 50);
2 INSERT INTO reducere VALUES (2, 'Pensionar', 50);
3 INSERT INTO reducere VALUES (3, 'Angajat', 35);
4 INSERT INTO reducere VALUES (4, 'Donator sange', 40);
5 INSERT INTO reducere VALUES (5, 'Elev', 25);

```

Below the code, the output shows five rows inserted:

```

1 row(s) inserted.

```

At the bottom, a footer bar includes links to Feedback, Help, and the user's email address: alexandra-diana.ciocan@s.unibuc.ro.

The screenshot shows the Oracle Live SQL interface. The sidebar is identical to the first one. The main area is titled "SQL Worksheet" and contains the following SQL code:

```

1 select * from reducere;

```

Below the code, the results are displayed in a table:

ID_REDUCERE	NUME	VALOARE
1	Student	50
2	Pensionar	50
3	Angajat	35
4	Donator sange	40
5	Elev	25

A "Download CSV" button is visible below the table. The footer bar at the bottom includes links to Feedback, Help, and the user's email address: alexandra-diana.ciocan@s.unibuc.ro.

```

INSERT INTO plata VALUES (1, 90, to_date('2022-07-01', 'yyyy-mm-dd'), 1);

INSERT INTO plata VALUES (2, 150, to_date('2022-07-03', 'yyyy-mm-dd'), 2);

INSERT INTO plata VALUES (3, 195, to_date('2022-08-06', 'yyyy-mm-dd'), 3);

INSERT INTO plata VALUES (4, 75, to_date('2022-09-21', 'yyyy-mm-dd'), 6);

INSERT INTO plata VALUES (5, 90, to_date('2022-06-19', 'yyyy-mm-dd'), 8);

INSERT INTO plata VALUES (6, 25, to_date('2022-08-21', 'yyyy-mm-dd'), 10);

INSERT INTO plata VALUES (7, 45, to_date('2022-08-24', 'yyyy-mm-dd'), 11);

```

The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with navigation links: Home, SQL Worksheet (which is selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet". It contains the following SQL code:

```

1 INSERT INTO plata VALUES (1, 90, to_date('2022-07-01', 'yyyy-mm-dd'), 1);
2 INSERT INTO plata VALUES (2, 150, to_date('2022-07-03', 'yyyy-mm-dd'), 2);
3 INSERT INTO plata VALUES (3, 195, to_date('2022-08-06', 'yyyy-mm-dd'), 3);
4 INSERT INTO plata VALUES (4, 75, to_date('2022-09-21', 'yyyy-mm-dd'), 6);
5 INSERT INTO plata VALUES (5, 90, to_date('2022-06-19', 'yyyy-mm-dd'), 8);
6 INSERT INTO plata VALUES (6, 25, to_date('2022-08-21', 'yyyy-mm-dd'), 10);
7 INSERT INTO plata VALUES (7, 45, to_date('2022-08-24', 'yyyy-mm-dd'), 11);
8

```

Below the code, the results of the insertions are displayed as:

```

1 row(s) inserted.

```

At the bottom of the interface, it says "2022 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤ using Oracle APEX - Privacy - Terms of Use".

The screenshot shows the Oracle Live SQL interface. The sidebar is identical to the first one. The main area is titled "SQL Worksheet". It contains the following SQL code:

```

1 select * from plata;

```

Below the code, the results are shown in a table:

ID_PLATA	SUMA	DATA_PLATA	ID_REZERVARE
1	90	01-JUL-22	1
2	150	03-JUL-22	2
3	195	06-AUG-22	3
4	75	21-SEP-22	6
5	90	19-JUN-22	8
6	25	21-AUG-22	10
7	45	24-AUG-22	11

Below the table, there's a "Download CSV" button and a note "7 rows selected.". At the bottom, it says "2023 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤ using Oracle APEX - Privacy - Terms of Use".

INSERT INTO implica VALUES (1, 1);

INSERT INTO implica VALUES (1, 2);

INSERT INTO implica VALUES (2, 1);

INSERT INTO implica VALUES (2, 2);

INSERT INTO implica VALUES (2, 3);

INSERT INTO implica VALUES (2, 4);

INSERT INTO implica VALUES (3, 4);

INSERT INTO implica VALUES (6, 1);

INSERT INTO implica VALUES (6, 5);

INSERT INTO implica VALUES (6, 3);

INSERT INTO implica VALUES (7, 1);

INSERT INTO implica VALUES (7, 3);

The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with options like Home, SQL Worksheet, My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet". It contains the following SQL code:

```
1 INSERT INTO implica VALUES (1, 1);
2 INSERT INTO implica VALUES (1, 2);
3 INSERT INTO implica VALUES (2, 1);
4 INSERT INTO implica VALUES (2, 2);
5 INSERT INTO implica VALUES (2, 3);
6 INSERT INTO implica VALUES (2, 4);
7 INSERT INTO implica VALUES (3, 4);
8 INSERT INTO implica VALUES (6, 1);
9 INSERT INTO implica VALUES (6, 5);
10 INSERT INTO implica VALUES (6, 3);
11 INSERT INTO implica VALUES (7, 1);
12 INSERT INTO implica VALUES (7, 3);
```

Below the code, the output shows:

```
1 row(s) inserted.
```

At the bottom, it says "2022 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤️ using Oracle APEX - Privacy - Terms of Use".

The screenshot shows the Oracle Live SQL interface. The sidebar is identical to the previous one. The main area is titled "SQL Worksheet". It contains the following SQL code:

```
1 select * from implica;
```

Below the code, a table is displayed with the following data:

ID_PLATA	ID_REDUCERE
1	1
1	2
2	1
2	2
2	3
2	4
3	4
6	1
6	3
6	5

At the bottom, it says "2023 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤️ using Oracle APEX - Privacy - Terms of Use".

-- pentru bilete, starea este exprimată după convenția: 0 = nerezervat, 1 = rezervat

INSERT INTO bilet VALUES (1, 1, 1, 1, 7, NULL, 35, 0);

INSERT INTO bilet VALUES (1, 2, 1, 1, 8, NULL, 30, 0);

INSERT INTO bilet VALUES (2, 2, 2, 1, 8, NULL, 30, 0);

INSERT INTO bilet VALUES (3, 2, 3, 1, 8, NULL, 30, 0);

INSERT INTO bilet VALUES (4, 2, 4, 1, 8, NULL, 30, 0);

```
INSERT INTO bilet VALUES (5, 2, 5, 1, 8, NULL, 30, 0);
INSERT INTO bilet VALUES (1, 3, 1, 2, 4, 1, 45, 1);
INSERT INTO bilet VALUES (2, 3, 2, 2, 4, 1, 45, 1);
INSERT INTO bilet VALUES (3, 3, 3, 2, 4, NULL, 45, 0);
INSERT INTO bilet VALUES (1, 4, 1, 1, 9, 3, 65, 1);
INSERT INTO bilet VALUES (2, 4, 2, 1, 9, 3, 65, 1);
INSERT INTO bilet VALUES (3, 4, 3, 1, 9, 3, 65, 1);
INSERT INTO bilet VALUES (4, 4, 4, 1, 9, NULL, 65, 0);
INSERT INTO bilet VALUES (5, 4, 5, 1, 9, NULL, 65, 0);
INSERT INTO bilet VALUES (1, 5, 1, 1, 8, NULL, 25, 0);
INSERT INTO bilet VALUES (2, 5, 2, 1, 8, NULL, 25, 0);
INSERT INTO bilet VALUES (3, 5, 3, 1, 8, NULL, 25, 0);
INSERT INTO bilet VALUES (4, 5, 4, 1, 8, NULL, 25, 0);
INSERT INTO bilet VALUES (5, 5, 5, 1, 8, NULL, 25, 0);
INSERT INTO bilet VALUES (1, 6, 1, 2, 2, NULL, 35, 0);
INSERT INTO bilet VALUES (2, 6, 2, 2, 2, NULL, 35, 0);
INSERT INTO bilet VALUES (3, 6, 3, 2, 2, NULL, 35, 0);
INSERT INTO bilet VALUES (4, 6, 4, 2, 2, NULL, 35, 0);
INSERT INTO bilet VALUES (5, 6, 5, 2, 2, NULL, 35, 0);
INSERT INTO bilet VALUES (1, 7, 1, 1, 9, 2, 30, 1);
INSERT INTO bilet VALUES (2, 7, 2, 1, 9, 2, 30, 1);
INSERT INTO bilet VALUES (3, 7, 3, 1, 9, 2, 30, 1);
INSERT INTO bilet VALUES (4, 7, 4, 1, 9, 2, 30, 1);
INSERT INTO bilet VALUES (5, 7, 5, 1, 9, 2, 30, 1);
INSERT INTO bilet VALUES (1, 8, 1, 1, 5, 4, 45, 1);
INSERT INTO bilet VALUES (2, 8, 2, 1, 5, NULL, 45, 0);
INSERT INTO bilet VALUES (3, 8, 3, 1, 5, 11, 45, 1);
```

```
INSERT INTO bilet VALUES (4, 8, 4, 1, 5, NULL, 45, 0);
INSERT INTO bilet VALUES (1, 9, 1, 2, 7, NULL, 65, 0);
INSERT INTO bilet VALUES (2, 9, 2, 2, 7, NULL, 65, 0);
INSERT INTO bilet VALUES (3, 9, 3, 2, 7, NULL, 65, 0);
INSERT INTO bilet VALUES (4, 9, 4, 2, 7, NULL, 65, 0);
INSERT INTO bilet VALUES (5, 9, 5, 2, 7, NULL, 65, 0);
INSERT INTO bilet VALUES (1, 10, 1, 2, 4, NULL, 25, 0);
INSERT INTO bilet VALUES (2, 10, 2, 2, 4, NULL, 25, 0);
INSERT INTO bilet VALUES (3, 10, 3, 2, 4, NULL, 25, 0);
INSERT INTO bilet VALUES (1, 11, 1, 3, 1, NULL, 35, 0);
INSERT INTO bilet VALUES (2, 11, 2, 3, 1, NULL, 35, 0);
INSERT INTO bilet VALUES (3, 11, 3, 3, 1, NULL, 35, 0);
INSERT INTO bilet VALUES (4, 11, 4, 3, 1, NULL, 35, 0);
INSERT INTO bilet VALUES (5, 11, 5, 3, 1, NULL, 35, 0);
INSERT INTO bilet VALUES (1, 12, 1, 2, 7, NULL, 30, 0);
INSERT INTO bilet VALUES (2, 12, 2, 2, 7, NULL, 30, 0);
INSERT INTO bilet VALUES (3, 12, 3, 2, 7, NULL, 30, 0);
INSERT INTO bilet VALUES (4, 12, 4, 2, 7, NULL, 30, 0);
INSERT INTO bilet VALUES (5, 12, 5, 2, 7, NULL, 30, 0);
INSERT INTO bilet VALUES (1, 13, 1, 2, 6, 5, 45, 1);
INSERT INTO bilet VALUES (2, 13, 2, 2, 6, 5, 45, 1);
INSERT INTO bilet VALUES (3, 13, 3, 2, 6, NULL, 45, 0);
INSERT INTO bilet VALUES (4, 13, 4, 2, 6, NULL, 45, 0);
INSERT INTO bilet VALUES (5, 13, 5, 2, 6, NULL, 45, 0);
INSERT INTO bilet VALUES (1, 14, 1, 1, 8, NULL, 65, 0);
INSERT INTO bilet VALUES (2, 14, 2, 1, 8, NULL, 65, 0);
INSERT INTO bilet VALUES (3, 14, 3, 1, 8, NULL, 65, 0);
```

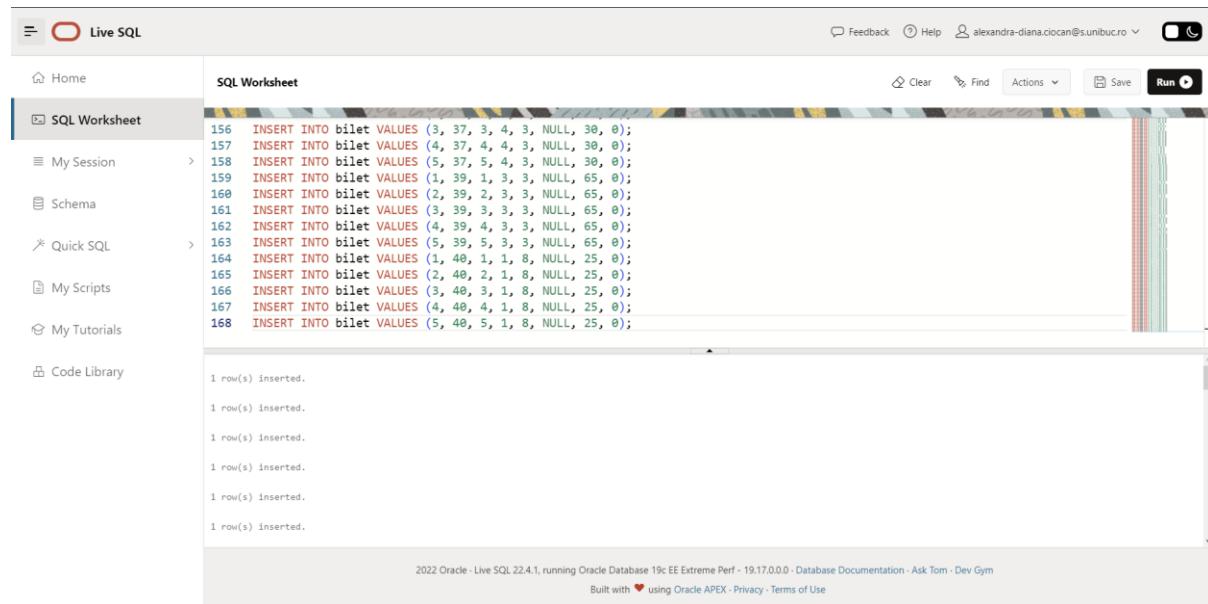
```
INSERT INTO bilet VALUES (4, 14, 4, 1, 8, NULL, 65, 0);
INSERT INTO bilet VALUES (5, 14, 5, 1, 8, NULL, 65, 0);
INSERT INTO bilet VALUES (1, 15, 1, 1, 9, 6, 25, 1);
INSERT INTO bilet VALUES (2, 15, 2, 1, 9, 6, 25, 1);
INSERT INTO bilet VALUES (3, 15, 3, 1, 9, 6, 25, 1);
INSERT INTO bilet VALUES (4, 15, 4, 1, 9, NULL, 25, 0);
INSERT INTO bilet VALUES (5, 15, 5, 1, 9, NULL, 25, 0);
INSERT INTO bilet VALUES (1, 16, 1, 2, 7, NULL, 35, 0);
INSERT INTO bilet VALUES (2, 16, 2, 2, 7, NULL, 35, 0);
INSERT INTO bilet VALUES (3, 16, 3, 2, 7, NULL, 35, 0);
INSERT INTO bilet VALUES (4, 16, 4, 2, 7, NULL, 35, 0);
INSERT INTO bilet VALUES (5, 16, 5, 2, 7, NULL, 35, 0);
INSERT INTO bilet VALUES (1, 17, 1, 1, 1, NULL, 30, 0);
INSERT INTO bilet VALUES (2, 17, 2, 1, 1, NULL, 30, 0);
INSERT INTO bilet VALUES (3, 17, 3, 1, 1, NULL, 30, 0);
INSERT INTO bilet VALUES (4, 17, 4, 1, 1, NULL, 30, 0);
INSERT INTO bilet VALUES (5, 17, 5, 1, 1, NULL, 30, 0);
INSERT INTO bilet VALUES (1, 18, 1, 2, 2, NULL, 45, 0);
INSERT INTO bilet VALUES (2, 18, 2, 2, 2, 8, 45, 1);
INSERT INTO bilet VALUES (3, 18, 3, 2, 2, 8, 45, 1);
INSERT INTO bilet VALUES (4, 18, 4, 2, 2, NULL, 45, 0);
INSERT INTO bilet VALUES (5, 18, 5, 2, 2, NULL, 45, 0);
INSERT INTO bilet VALUES (1, 19, 1, 1, 7, NULL, 65, 0);
INSERT INTO bilet VALUES (1, 20, 1, 3, 1, NULL, 25, 0);
INSERT INTO bilet VALUES (2, 20, 2, 3, 1, NULL, 25, 0);
INSERT INTO bilet VALUES (3, 20, 3, 3, 1, 9, 25, 1);
INSERT INTO bilet VALUES (4, 20, 4, 3, 1, 9, 25, 1);
```

```
INSERT INTO bilet VALUES (5, 20, 5, 3, 1, 9, 25, 1);
INSERT INTO bilet VALUES (1, 21, 1, 2, 4, NULL, 35, 0);
INSERT INTO bilet VALUES (2, 21, 2, 2, 4, NULL, 35, 0);
INSERT INTO bilet VALUES (3, 21, 3, 2, 4, NULL, 35, 0);
INSERT INTO bilet VALUES (1, 22, 1, 1, 4, 7, 30, 1);
INSERT INTO bilet VALUES (2, 22, 2, 1, 4, NULL, 30, 0);
INSERT INTO bilet VALUES (3, 22, 3, 1, 4, NULL, 30, 0);
INSERT INTO bilet VALUES (4, 22, 4, 1, 4, NULL, 30, 0);
INSERT INTO bilet VALUES (5, 22, 5, 1, 4, NULL, 30, 0);
INSERT INTO bilet VALUES (1, 23, 1, 2, 1, NULL, 45, 0);
INSERT INTO bilet VALUES (2, 23, 2, 2, 1, NULL, 45, 0);
INSERT INTO bilet VALUES (3, 23, 3, 2, 1, NULL, 45, 0);
INSERT INTO bilet VALUES (4, 23, 4, 2, 1, NULL, 45, 0);
INSERT INTO bilet VALUES (5, 23, 5, 2, 1, NULL, 45, 0);
INSERT INTO bilet VALUES (1, 24, 1, 3, 6, NULL, 65, 0);
INSERT INTO bilet VALUES (2, 24, 2, 3, 6, NULL, 65, 0);
INSERT INTO bilet VALUES (3, 24, 3, 3, 6, NULL, 65, 0);
INSERT INTO bilet VALUES (1, 25, 1, 2, 4, 10, 25, 1);
INSERT INTO bilet VALUES (2, 25, 2, 2, 4, NULL, 25, 0);
INSERT INTO bilet VALUES (3, 25, 3, 2, 4, NULL, 25, 0);
INSERT INTO bilet VALUES (1, 26, 1, 1, 8, NULL, 35, 0);
INSERT INTO bilet VALUES (2, 26, 2, 1, 8, NULL, 35, 0);
INSERT INTO bilet VALUES (3, 26, 3, 1, 8, NULL, 35, 0);
INSERT INTO bilet VALUES (4, 26, 4, 1, 8, NULL, 35, 0);
INSERT INTO bilet VALUES (5, 26, 5, 1, 8, NULL, 35, 0);
INSERT INTO bilet VALUES (1, 27, 1, 2, 7, NULL, 30, 0);
INSERT INTO bilet VALUES (2, 27, 2, 2, 7, NULL, 30, 0);
```

```
INSERT INTO bilet VALUES (3, 27, 3, 2, 7, NULL, 30, 0);
INSERT INTO bilet VALUES (4, 27, 4, 2, 7, NULL, 30, 0);
INSERT INTO bilet VALUES (5, 27, 5, 2, 7, NULL, 30, 0);
INSERT INTO bilet VALUES (1, 28, 1, 2, 5, NULL, 45, 0);
INSERT INTO bilet VALUES (2, 28, 2, 2, 5, NULL, 45, 0);
INSERT INTO bilet VALUES (3, 28, 3, 2, 5, NULL, 45, 0);
INSERT INTO bilet VALUES (1, 29, 1, 1, 9, NULL, 65, 0);
INSERT INTO bilet VALUES (2, 29, 2, 1, 9, NULL, 65, 0);
INSERT INTO bilet VALUES (3, 29, 3, 1, 9, NULL, 65, 0);
INSERT INTO bilet VALUES (4, 29, 4, 1, 9, NULL, 65, 0);
INSERT INTO bilet VALUES (5, 29, 5, 1, 9, NULL, 65, 0);
INSERT INTO bilet VALUES (1, 30, 1, 1, 8, NULL, 25, 0);
INSERT INTO bilet VALUES (2, 30, 2, 1, 8, NULL, 25, 0);
INSERT INTO bilet VALUES (3, 30, 3, 1, 8, NULL, 25, 0);
INSERT INTO bilet VALUES (4, 30, 4, 1, 8, NULL, 25, 0);
INSERT INTO bilet VALUES (5, 30, 5, 1, 8, NULL, 25, 0);
INSERT INTO bilet VALUES (1, 31, 1, 1, 7, NULL, 35, 0);
INSERT INTO bilet VALUES (1, 32, 1, 1, 6, NULL, 30, 0);
INSERT INTO bilet VALUES (2, 32, 2, 1, 6, NULL, 30, 0);
INSERT INTO bilet VALUES (3, 32, 3, 1, 6, NULL, 30, 0);
INSERT INTO bilet VALUES (4, 32, 4, 1, 6, NULL, 30, 0);
INSERT INTO bilet VALUES (5, 32, 5, 1, 6, NULL, 30, 0);
INSERT INTO bilet VALUES (1, 33, 1, 1, 8, NULL, 45, 0);
INSERT INTO bilet VALUES (2, 33, 2, 1, 8, NULL, 45, 0);
INSERT INTO bilet VALUES (3, 33, 3, 1, 8, NULL, 45, 0);
INSERT INTO bilet VALUES (4, 33, 4, 1, 8, NULL, 45, 0);
INSERT INTO bilet VALUES (5, 33, 5, 1, 8, NULL, 45, 0);
```

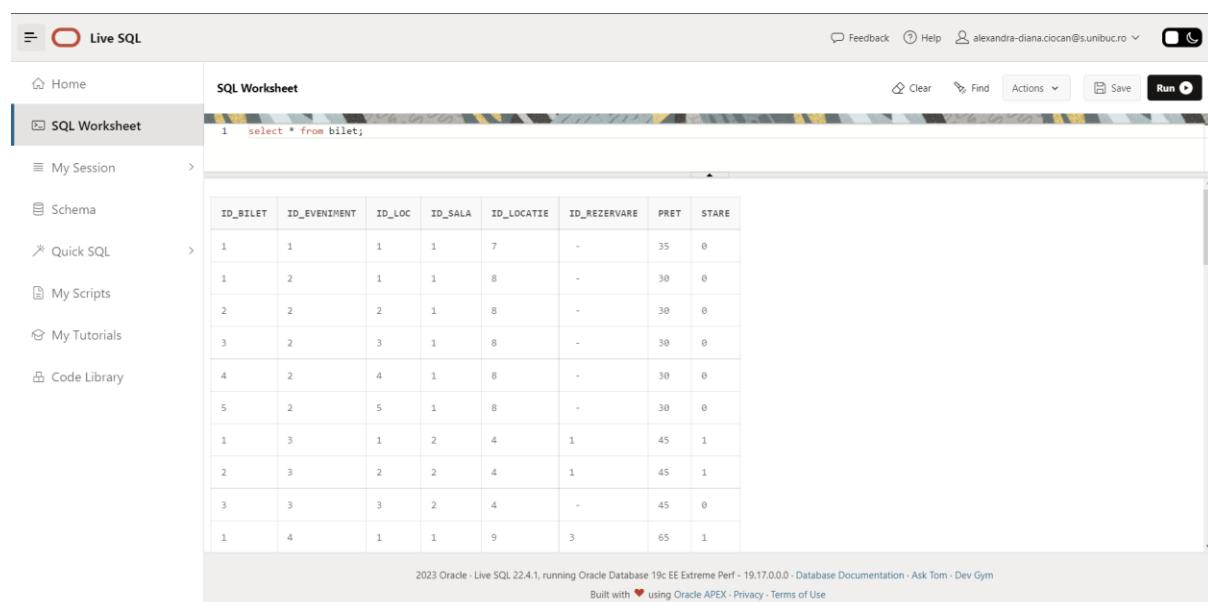
```
INSERT INTO bilet VALUES (1, 34, 1, 2, 1, NULL, 65, 0);
INSERT INTO bilet VALUES (2, 34, 2, 2, 1, NULL, 65, 0);
INSERT INTO bilet VALUES (3, 34, 3, 2, 1, NULL, 65, 0);
INSERT INTO bilet VALUES (4, 34, 4, 2, 1, NULL, 65, 0);
INSERT INTO bilet VALUES (5, 34, 5, 2, 1, NULL, 65, 0);
INSERT INTO bilet VALUES (1, 35, 1, 4, 5, NULL, 25, 0);
INSERT INTO bilet VALUES (2, 35, 2, 4, 5, NULL, 25, 0);
INSERT INTO bilet VALUES (3, 35, 3, 4, 5, NULL, 25, 0);
INSERT INTO bilet VALUES (4, 35, 4, 4, 5, NULL, 25, 0);
INSERT INTO bilet VALUES (5, 35, 5, 4, 5, NULL, 25, 0);
INSERT INTO bilet VALUES (1, 36, 1, 2, 4, NULL, 35, 0);
INSERT INTO bilet VALUES (2, 36, 2, 2, 4, NULL, 35, 0);
INSERT INTO bilet VALUES (3, 36, 3, 2, 4, NULL, 35, 0);
INSERT INTO bilet VALUES (1, 37, 1, 4, 3, NULL, 30, 0);
INSERT INTO bilet VALUES (2, 37, 2, 4, 3, NULL, 30, 0);
INSERT INTO bilet VALUES (3, 37, 3, 4, 3, NULL, 30, 0);
INSERT INTO bilet VALUES (4, 37, 4, 4, 3, NULL, 30, 0);
INSERT INTO bilet VALUES (5, 37, 5, 4, 3, NULL, 30, 0);
INSERT INTO bilet VALUES (1, 39, 1, 3, 3, NULL, 65, 0);
INSERT INTO bilet VALUES (2, 39, 2, 3, 3, NULL, 65, 0);
INSERT INTO bilet VALUES (3, 39, 3, 3, 3, NULL, 65, 0);
INSERT INTO bilet VALUES (4, 39, 4, 3, 3, NULL, 65, 0);
INSERT INTO bilet VALUES (5, 39, 5, 3, 3, NULL, 65, 0);
INSERT INTO bilet VALUES (1, 40, 1, 1, 8, NULL, 25, 0);
INSERT INTO bilet VALUES (2, 40, 2, 1, 8, NULL, 25, 0);
INSERT INTO bilet VALUES (3, 40, 3, 1, 8, NULL, 25, 0);
INSERT INTO bilet VALUES (4, 40, 4, 1, 8, NULL, 25, 0);
```

INSERT INTO bilet VALUES (5, 40, 5, 1, 8, NULL, 25, 0);



The screenshot shows the Live SQL interface with the following details:

- Toolbar:** Includes Home, SQL Worksheet, My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library.
- SQL Worksheet:** Displays 18 numbered SQL statements (156 to 173) inserting data into the bilet table. The last statement is the one provided in the question.
- Output:** Shows the confirmation message "1 row(s) inserted." repeated 18 times, indicating successful execution of each insert statement.
- Footer:** Displays the copyright notice "2022 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤ using Oracle APEX - Privacy - Terms of Use".



The screenshot shows the Live SQL interface with the following details:

- Toolbar:** Includes Home, SQL Worksheet, My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library.
- SQL Worksheet:** Displays a single SQL statement: "1 select * from bilet;"
- Output:** Shows a grid-based table with 13 rows of data. The columns are labeled: ID_BILET, ID_EVENIMENT, ID_LOC, ID_SALA, ID_LOCATIE, ID_RESERVARE, PRET, and STARE.
- Table Data:** The table contains the following data:

ID_BILET	ID_EVENIMENT	ID_LOC	ID_SALA	ID_LOCATIE	ID_RESERVARE	PRET	STARE
1	1	1	1	7	-	35	0
1	2	1	1	8	-	30	0
2	2	2	1	8	-	30	0
3	2	3	1	8	-	30	0
4	2	4	1	8	-	30	0
5	2	5	1	8	-	30	0
1	3	1	2	4	1	45	1
2	3	2	2	4	1	45	1
3	3	3	2	4	-	45	0
1	4	1	1	9	3	65	1

- Footer:** Displays the copyright notice "2023 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤ using Oracle APEX - Privacy - Terms of Use".

6. Formulați în limbaj natural o problemă pe care să o rezolvați folosind un subprogram stocat independent care să utilizeze două tipuri diferite de colecții studiate. Apelați subprogramul.

Cerință:

Platforma vrea să facă niște modificări la baza de date care să îi permită să creeze niște statistici legate de vânzările produse. Astfel, se introduce o nouă convenție pentru baza de date: nu vrem sa contorizăm numai dacă biletele sunt rezervate sau nerezervate, vrem sa contorizăm și dacă cele pentru care a trecut spectacolul au fost plătite sau nu, astfel:

0 = bilet nerezervat pentru un spectacol din viitor

1 = bilet rezervat pentru un spectacol din viitor

2 = bilet nevândut pentru un spectacol care a trecut (nu contează dacă a fost rezervat sau nu, contează doar dacă a fost plătit)

3 = bilet vândut pentru un spectacol care a trecut (a fost rezervat și plătit)

Să se scrie un subprogram care se ocupă cu actualizarea tabelei de bilete, după noua convenție, și ne oferă informații despre procentul în care biletele rezervate au fost și plătite eventual.

Rezolvare:

create or replace procedure ex6 is

```
type rec is record (cod bilet.id_bilet%type,
                     eveniment bilet.id_eveniment%type,
                     loc bilet.id_loc%type,
                     sala bilet.id_sala%type,
                     locatie bilet.id_locatie%type,
                     rezervare bilet.id_rezervare%type,
                     pret bilet.pret%type,
                     stare bilet.stare%type);

type tablou_indexat is table of rec index by pls_integer;

type tablou_imbricat is table of bilet.stare%type;

de_actualizat tablou_indexat;
date_vechi tablou_imbricat := tablou_imbricat();
```

```
date_noi tablou_imbricat := tablou_imbricat();

rez pls_integer := 0;

plat pls_integer := 0;

aux rezervare.stare%type;

exceptie exception;

begin

    select stare bulk collect into date_vechi

        from bilet;

    delete

        from bilet b

        where (select data_eveniment from eveniment e where e.id_eveniment = b.id_eveniment)<sysdate and stare != 2 and stare != 3

            returning b.id_bilet, b.id_eveniment, b.id_loc, b.id_sala, b.id_locatie, b.id_rezervare, b.pret,
b.stare bulk collect into de_actualizat;

    if de_actualizat.count = 0 then

        raise exceptie;

    end if;

    for i in de_actualizat.first..de_actualizat.last loop

        if de_actualizat(i).rezervare is null then

            de_actualizat(i).stare := 2;

        else

            select r.stare into aux

                from rezervare r

                where r.id_rezervare = de_actualizat(i).rezervare;
```

```
if aux = 0 then
    de_actualizat(i).stare := 2;
else
    de_actualizat(i).stare := 3;
end if;
end if;
```

```
insert into bilet
values      (de_actualizat(i).cod,      de_actualizat(i).eveniment,      de_actualizat(i).loc,
de_actualizat(i).sala,  de_actualizat(i).locatie,  de_actualizat(i).rezervare,  de_actualizat(i).pret,
de_actualizat(i).stare);
end loop;
```

```
select stare bulk collect into date_noi
from bilet;
```

```
for i in date_vechi.first..date_vechi.last loop
    if date_vechi(i) = 1 then
        rez := rez + 1;
        if date_noi(i) = 3 then
            plat := plat + 1;
        end if;
    end if;
end loop;
```

```
dbms_output.put_line(round(plat/rez*100,2) || '% din biletele pentru rezervari trecute au fost
platite.');
```

exception

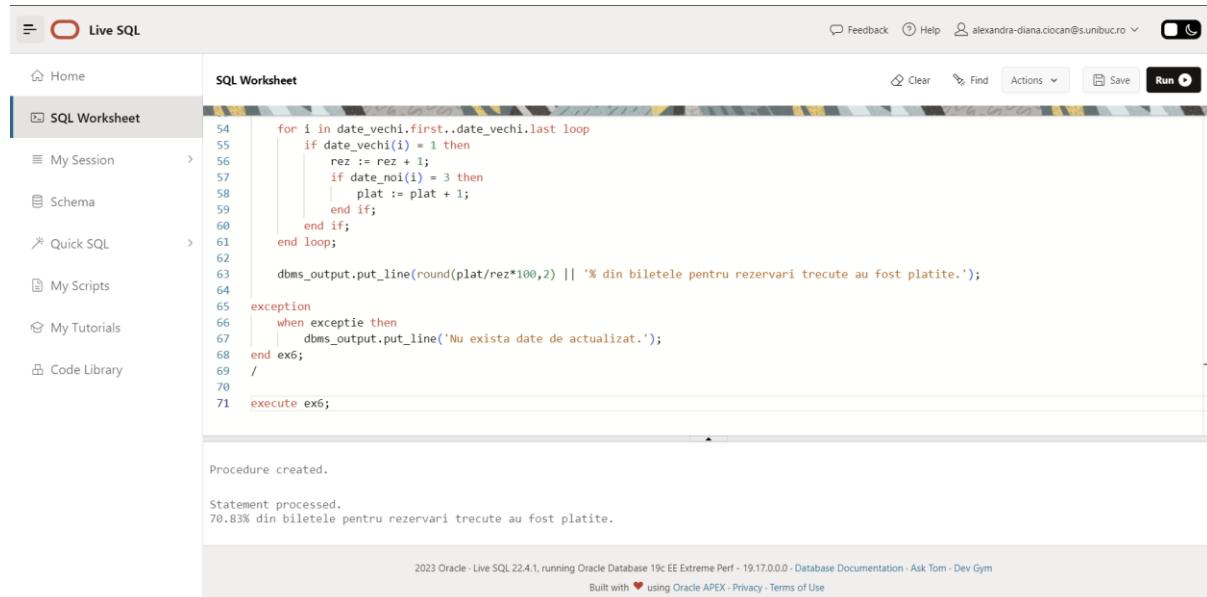
when exceptie then

```
    dbms_output.put_line('Nu exista date de actualizat.');
```

```
end ex6;
```

/

```
execute ex6;
```



```
54     for i in date_vechi.first..date_vechi.last loop
55         if date_vechi(i) = 1 then
56             rez := rez + 1;
57             if date_noi(i) = 3 then
58                 plat := plat + 1;
59             end if;
60         end if;
61     end loop;

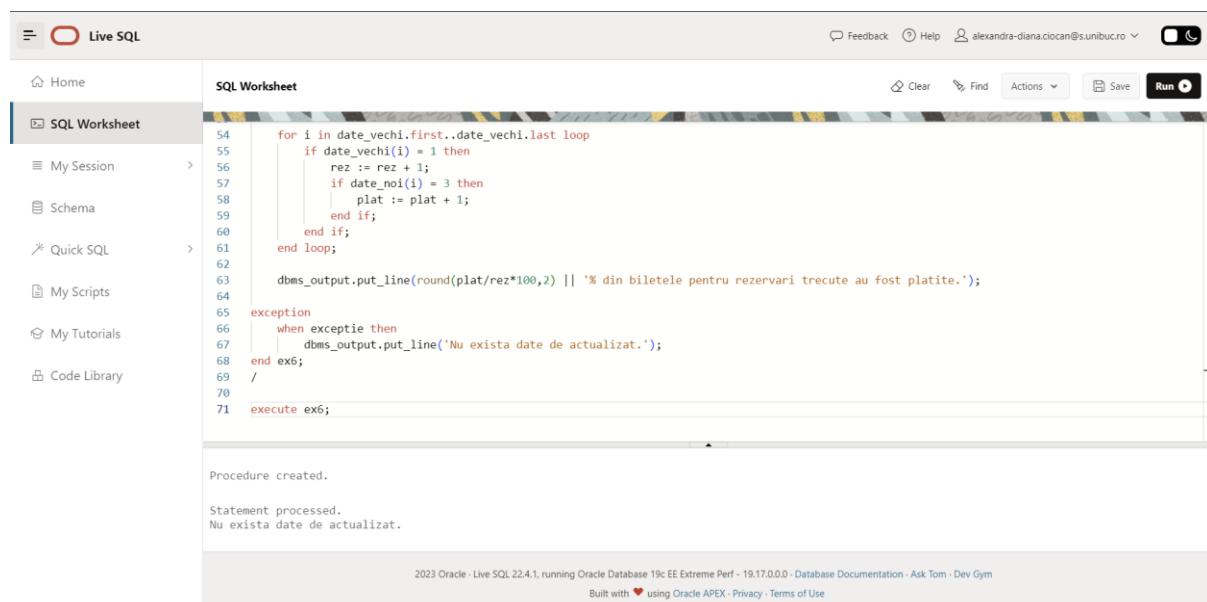
62     dbms_output.put_line(round(plat/rez*100,2) || '% din biletele pentru rezervari trecute au fost platite.);

63 exception
64     when exceptie then
65         dbms_output.put_line('Nu exista date de actualizat.');
66 end ex6;
67 /
68
69
70
71 execute ex6;
```

Procedure created.

Statement processed.
70.83% din biletele pentru rezervari trecute au fost platite.

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```
54     for i in date_vechi.first..date_vechi.last loop
55         if date_vechi(i) = 1 then
56             rez := rez + 1;
57             if date_noi(i) = 3 then
58                 plat := plat + 1;
59             end if;
60         end if;
61     end loop;

62     dbms_output.put_line(round(plat/rez*100,2) || '% din biletele pentru rezervari trecute au fost platite.);

63 exception
64     when exceptie then
65         dbms_output.put_line('Nu exista date de actualizat.');
66 end ex6;
67 /
68
69
70
71 execute ex6;
```

Procedure created.

Statement processed.
Nu exista date de actualizat.

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7. Formulați în limbaj natural o problemă pe care să o rezolvați folosind un subprogram stocat independent care să utilizeze 2 tipuri diferite de cursoare studiate, unul dintre acestea fiind cursor parametrizat. Apelați subprogramul.

Cerință:

Platforma colaborează cu numeroase spectacole, însă fiecare spectacol pune la dispoziție un număr diferit de bilete și utilizatorii care arată interes în spectacole (plasează rezervări), de asemenea, diferă. Astfel, avem nevoie de un subprogram care să afișeze un top al celor mai populare spectacole printre utilizatori, iar pentru fiecare spectacol să știm numărul de bilete rezervate, dar și o listă cu utilizatorii care au plasat rezervări.

Rezolvare:

```
create or replace procedure ex7 is
```

```
v_spec spectacol.id_spectacol%type;
v_nume spectacol.nume%type;
v_rezervari pls_integer;
v_ant pls_integer;
v_indice pls_integer := 0;
v_util utilizator.nume%type;

--cursor parametrizat

cursor utilizatori(parametru spectacol.id_spectacol%type) is
    select unique nume
        from utilizator u
        join rezervare r on u.id_utilizator = r.id_utilizator
        where r.id_rezervare in (
            select b.id_rezervare
                from bilet b
                join eveniment e on b.id_eveniment = e.id_eveniment
                where e.id_spectacol = parametru);

begin
    v_indice := 0;
```

```
--cursor implicit cu subcereri

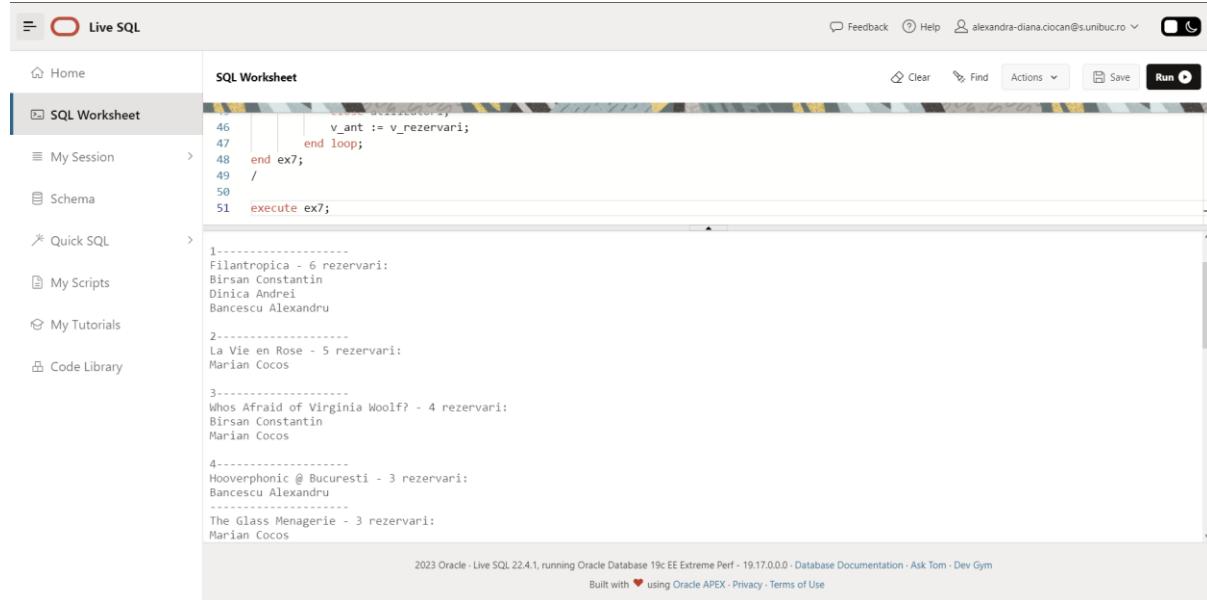
for spec in (select s.id_spectacol cod, s.numere nume, count(id_rezervare) rezervari
              from spectacol s
              left join eveniment e on s.id_spectacol = e.id_spectacol
              left join bilet b on e.id_eveniment = b.id_eveniment
              group by s.id_spectacol, s.numere
              order by rezervari desc)
loop

  v_spec := spec.cod;
  v_numere := spec.numere;
  v_rezervari := spec.rezervari;

  if v_indice = 0 or v_ant != v_rezervari then
    v_indice := v_indice + 1;
    dbms_output.put_line(' ');
    dbms_output.put_line(v_indice || '-----');
  else
    dbms_output.put_line('-----');
  end if;

  dbms_output.put_line(v_numere || ' - ' || v_rezervari || ' rezervari:');
  open utilizatori(v_spec);
loop
  fetch utilizatori into v_util;
  exit when utilizatori%notfound;
  dbms_output.put_line(v_util);
end loop;
close utilizatori;
```

```
v_ant := v_rezervari;  
end loop;  
end ex7;  
  
/  
  
execute ex7;
```



The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with navigation links: Home, SQL Worksheet (which is selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet" and contains the following PL/SQL code:

```
45   begin  
46     v_ant := v_rezervari;  
47   end loop;  
48   /  
49   execute ex7;
```

Below the code, the results of the execution are displayed in three sections:

- 1-----
Filantropica - 6 rezervari:
Birsan Constantin
Dinica Andrei
Bancescu Alexandru
- 2-----
La Vie en Rose - 5 rezervari:
Marian Cocos
- 3-----
Whos Afraid of Virginia Woolf? - 4 rezervari:
Birsan Constantin
Marian Cocos
- 4-----
Hooverphonic @ Bucuresti - 3 rezervari:
Bancescu Alexandru
- The Glass Menagerie - 3 rezervari:
Marian Cocos

At the bottom of the worksheet, there is a footer with the text: "2023 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤ using Oracle APEX - Privacy - Terms of Use".

8. Formulați în limbaj natural o problemă pe care să o rezolvați folosind un subprogram stocat independent de tip funcție care să utilizeze într-o singură comandă SQL 3 dintre tabelele definite. Definiți minim 2 excepții. Apelați subprogramul astfel încât să evidențiați toate cazurile tratate.

Cerință:

Un utilizator dorește să vadă cât a cheltuit pe platformă de când s-a înregistrat și până acum. Este nevoie de o funcție care să returneze această informație.

Rezolvare:

```
create or replace function ex8(p_nume utilizator.nume%type)
```

```
return plata.suma%type
```

```
is
```

```
rezultat plata.suma%type;
```

```
verif_util number;
```

```
no_util exception;

too_many_util exception;

begin

    select count(*) into verif_util

    from utilizator

    where upper(ume) = upper(p_ume);

    if verif_util = 0 then

        raise no_util;

    elsif verif_util > 1 then

        raise too_many_util;

    end if;

    select sum(suma) into rezultat

    from utilizator u

    left join rezervare r on r.id_utilizator=u.id_utilizator

    left join plata p on p.id_rezervare=r.id_rezervare

    where upper(u.ume) = upper(p_ume) and r.stare = 1;

    return rezultat;

exception

    when no_util then

        raise_application_error(-20000, 'Nu exista utilizatori cu acest nume!');

    when too_many_util then

        raise_application_error(-20001, 'Mai mult de un utilizator cu acest nume!');

end ex8;

/
```

```
declare
    resultat plata.suma%type;
begin
    resultat := ex8('Marian Cocos');
    dbms_output.put_line(resultat);
exception
    when others then
        dbms_output.put_line('Eroarea are codul '||SQLCODE|| ' si mesajul ' || SQLERRM);
end;
/
declare
    resultat plata.suma%type;
begin
    resultat := ex8('nume inexistent');
    dbms_output.put_line(resultat);
exception
    when others then
        dbms_output.put_line('Eroarea are codul '||SQLCODE|| ' si mesajul ' || SQLERRM);
end;
/
declare
    resultat plata.suma%type;
begin
    insert into utilizator values (secv_utilizator.nextval, 'Marian Cocos', 'mk7i5u6yr5etr',
    'maarian__@hotmail.com', '0706377531');
```

```

resultat := ex8('Marian Cocos');

dbms_output.put_line(resultat);

exception

when others then

    dbms_output.put_line('Eroarea are codul '||SQLCODE|| ' si mesajul '|| SQLERRM);

end;

/

```

The screenshot shows the Oracle Live SQL interface. In the left sidebar, under 'My Session', there is a 'SQL Worksheet' tab. The main area displays the following PL/SQL code:

```

51      when others then
52          dbms_output.put_line('Eroarea are codul '||SQLCODE|| ' si mesajul '|| SQLERRM);
53      end;
54  /
55
56  declare
57      resultat plata.suma%type;
58  begin
59      insert into utilizator values (secv_utilizator.nextval, 'Marian Cocos', 'm7k15u6yrs7r', 'maarian__@hotmail.com', '0706377531');
60      resultat := ex8('Marian Cocos');
61      dbms_output.put_line(resultat);
62  exception
63      when others then
64          dbms_output.put_line('Eroarea are codul '||SQLCODE|| ' si mesajul '|| SQLERRM);
65  end;
66  /

```

Below the code, the output of the statements is shown:

```

Function created.

Statement processed.
225

Statement processed.
Eroarea are codul -20000 si mesajul ORA-20000: Nu exista utilizatori cu acest nume!

Statement processed.
Eroarea are codul -20001 si mesajul ORA-20001: Mai mult de un utilizator cu acest nume!

```

At the bottom right of the interface, it says 'Built with ❤ using Oracle APEX - Privacy - Terms of Use'.

9. Formulați în limbaj natural o problemă pe care să o rezolvați folosind un subprogram stocat independent de tip procedură care să utilizeze într-o singură comandă SQL 5 dintre tabelele definite. Tratați toate excepțiile care pot apărea, incluzând excepțiile NO_DATA_FOUND și TOO_MANY_ROWS. Apelați subprogramul astfel încât să evidențiați toate cazurile tratate.

Cerință:

Să se scrie o procedură care afișează, în cazul în care există, cea mai recentă folosire a unei reduceri a unui utilizator al căruia nume este transmis ca parametru.

Rezolvare:

```
create or replace procedure ex9(p_numere utilizator.nume%type)
```

is

```

verif_nume number;

nume_reducere reducere.nume%type;
```

```
data_plata plata.data_plata%type;
no_util exception;
too_many_util exception;
begin
  select count(*)
    into verif_nume
   from utilizator u
  where upper(u.nume)=upper(p_nume);

  if verif_nume = 0 then
    raise no_util;
  elsif verif_nume > 1 then
    raise too_many_util;
  end if;

  select r.nume "NUME REDUCERE", p.data_plata "ULTIMA UTILIZARE"
    into nume_reducere, data_plata
   from reducere r
  join implica i on i.id_reducere=r.id_reducere
  join plata p on i.id_plata=p.id_plata
  join rezervare rez on rez.id_rezervare=p.id_rezervare
  join utilizator u on rez.id_utilizator=u.id_utilizator
  where p.data_plata = (select max(p1.data_plata)
  from reducere r1
  join implica i1 on i1.id_reducere=r1.id_reducere
  join plata p1 on i1.id_plata=p1.id_plata
  where r1.id_reducere=r.id_reducere)
```

```
and upper(u.nume)=upper(p_nume)
order by months_between(sysdate, p.data_plata);

dbms_output.put_line('REDUCERE: ' || nume_reducere);
dbms_output.put_line('DATA: ' || data_plata);

exception
when no_data_found then
    raise_application_error(-20000, 'Utilizatorul nu a dispus de nicio reducere!');
when too_many_rows then
    raise_application_error(-20001, 'Mai multe reduceri in ultima plata!');
when no_util then
    raise_application_error(-20002, 'Nu exista utilizator cu acest nume!');
when too_many_util then
    raise_application_error(-20003, 'Mai mult de un utilizator cu acest nume!');

end ex9;
/

execute ex9('Bancescu Alexandru');
execute ex9('utilizator inexistent');
execute ex9('Marian Cocos');
execute ex9('Birsan Constantin');
execute ex9('Lungu David');
```

The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with navigation links: Home, SQL Worksheet (selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet". It contains the following PL/SQL code:

```

43     raise_application_error(-20002, 'Nu există utilizator cu acest nume!');
44   when too_many_util then
45     raise_application_error(-20003, 'Mai mult de un utilizator cu acest nume!');
46   end ex9;
47 /
48
49   execute ex9('Bancescu Alexandru');
50   execute ex9('utilizator inexistent');
51   execute ex9('Marian Cocos');
52   execute ex9('Birsan Constantin');
53   execute ex9('Lungu David');

```

Below the code, the output shows:

```

Procedure created.

ORA-20001: Mai multe reduceri in ultima plata! ORA-06512: at "SQL_GEGHXCMWRRVQJIWJDMGFOUZRC.EX9", line 41
ORA-06512: at line 1
ORA-06512: at "SYS.DBMS_SQL", line 1721

ORA-20003: Nu există utilizator cu acest nume! ORA-06512: at "SQL_GEGHXCMWRRVQJIWJDMGFOUZRC.EX9", line 43
ORA-06512: at line 1
ORA-06512: at "SYS.DBMS_SQL", line 1721

ORA-20003: Mai mult de un utilizator cu acest nume! ORA-06512: at "SQL_GEGHXCMWRRVQJIWJDMGFOUZRC.EX9", line 45
ORA-06512: at line 1
ORA-06512: at "SYS.DBMS_SQL", line 1721

```

At the bottom, it says "2023 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤️ using Oracle APEX - Privacy - Terms of Use".

This screenshot is similar to the first one, showing the same PL/SQL code and its execution results. The output includes error messages for ORA-06512 and ORA-20003. At the bottom, it displays a message about statement processing:

```

Statement processed.
REDUCERE: Elev
DATA: 21-AUG-22

```

It also includes the same footer information: "2023 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤️ using Oracle APEX - Privacy - Terms of Use".

10. Definiți un trigger de tip LMD la nivel de comandă. Declanșați trigger-ul.

Următorul trigger nu permite inserarea de noi evenimente până când nu au trecut toate evenimentele deja aflate în stadiul de organizare:

`create or replace trigger t10`

`before insert on eveniment`

`declare`

`ultima_data eveniment.data_eveniment%type;`

`begin`

`select max(data_eveniment)`

```

into ultima_data

from eveniment e;

if ultima_data > sysdate then

    raise_application_error(-20000, 'Organizatorul nu poate avea evenimente noi momentan!');

end if;

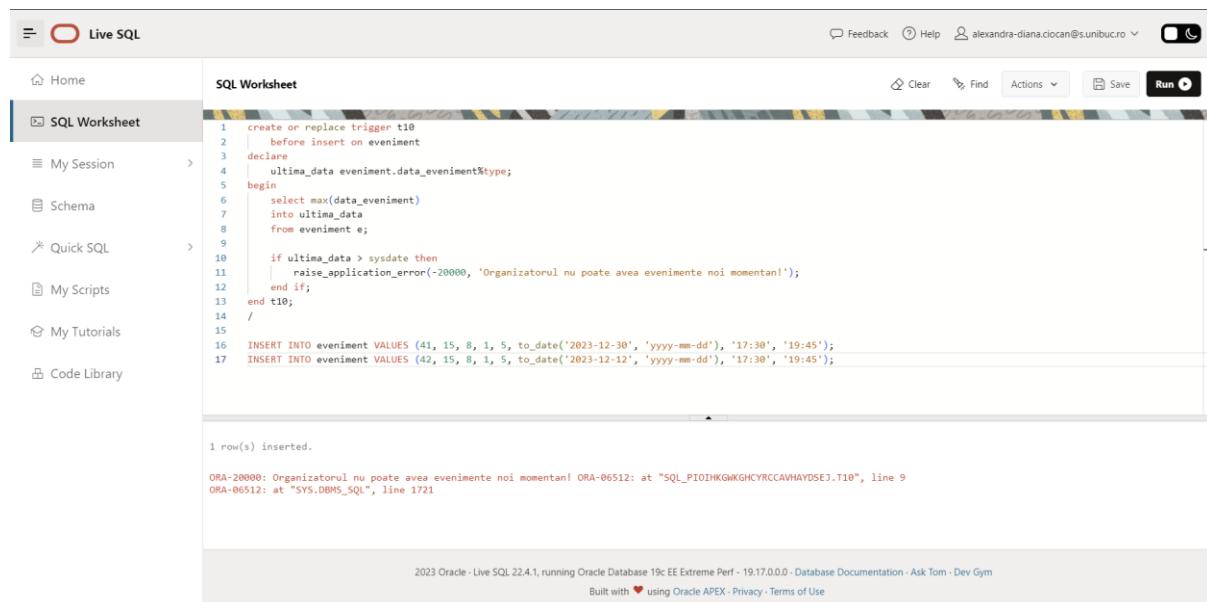
end t10;

/

```

INSERT INTO eveniment VALUES (41, 15, 8, 1, 5, to_date('2023-12-30', 'yyyy-mm-dd'), '17:30', '19:45');

INSERT INTO eveniment VALUES (42, 15, 8, 1, 5, to_date('2023-12-12', 'yyyy-mm-dd'), '17:30', '19:45');



The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with navigation links: Home, SQL Worksheet, My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet". It contains the following SQL code:

```

1 create or replace trigger t10
2   before insert on eveniment
3   declare
4     ultima_data eveniment.data_eveniment%type;
5   begin
6     select max(data_eveniment)
7       into ultima_data
8       from eveniment e;
9
10    if ultima_data > sysdate then
11      raise_application_error(-20000, 'Organizatorul nu poate avea evenimente noi momentan!');
12    end if;
13  end t10;
14 /
15
16 INSERT INTO eveniment VALUES (41, 15, 8, 1, 5, to_date('2023-12-30', 'yyyy-mm-dd'), '17:30', '19:45');
17 INSERT INTO eveniment VALUES (42, 15, 8, 1, 5, to_date('2023-12-12', 'yyyy-mm-dd'), '17:30', '19:45');

```

Below the code, the output shows:

```

1 row(s) inserted.

ORA-20000: Organizatorul nu poate avea evenimente noi momentan! ORA-06512: at "SQL_PIOIHKG@KGHCYRCCAVHAYDSEJ.T10", line 9
ORA-06512: at "SYS.DBMS_SQL", line 1721

```

At the bottom, it says: "2023 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym
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11. Definiți un trigger de tip LMD la nivel de linie. Declanșați trigger-ul.

Următorul trigger nu permite rezervarea de către utilizatori a unor bilete pentru evenimente care deja au trecut:

create or replace trigger t11

before update on bilet

for each row

```
declare
    data_even eveniment.data_eveniment%type;
begin
    if :new.stare = 1 and :old.stare = 0 then
        select data_eveniment
        into data_even
        from eveniment
        where id_eveniment = :new.id_eveniment;

        if data_even < sysdate then
            raise_application_error(-20000, 'Nu puteti rezerva bilet la evenimente trecute!');
        end if;
    end if;
end t11;
/
update bilet
set stare = 1
where stare = 0;
```

The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with options like Home, SQL Worksheet, My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet" and contains the following PL/SQL code:

```
7   if :new.stare = 1 and :old.stare = 0 then
8     select data_eveniment
9       into data_even
10      from eveniment
11     where id_eveniment = :new.id_eveniment;
12
13     if data_even < sysdate then
14       | raise_application_error(-20000, 'Nu puteti rezerva bilete la evenimente trecute!');
15     end if;
16   end if;
17 end t11;
18 /
19
20 update bilet
21 set stare = 1
22 where stare = 0;
```

Below the code, a message says "Trigger created." followed by two error messages: "ORA-20000: Nu puteti rezerva bilete la evenimente trecute! ORA-06512: at "SQL_WQOVKLDWNGJFEUJTQPOIKFACM.T11", line 11" and "ORA-06512: at "SYS.DBMS_SQL", line 1721". At the bottom, it says "2023 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym Built with ❤️ using Oracle APEX - Privacy - Terms of Use".

12. Definiți un trigger de tip LDD. Declanșați trigger-ul.

Pentru a proteja structura bazei de date, am creat un trigger de siguranță care nu permite ștergerea tabelelor, iar când vine vorba de alterare reține în tabelul ACTIUNI utilizatorul și data la care s-a efectuat alterarea:

```
create table actiuni (utilizator varchar(30), data_actiune date);
```

```
create or replace trigger t12
```

```
before drop or alter on schema
```

```
declare
```

```
  eroare exception;
```

```
begin
```

```
  if sysevent = 'ALTER' then
```

```
    insert into actiuni
```

```
      values (user, sysdate);
```

```
  end if;
```

```
  if sysevent = 'DROP' then
```

```
    raise eroare;
```

```
  end if;
```

exception

when eroare then

```
raise_application_error(-20005, 'Nu puteti sterge tabele din baza de date!');
```

when others then

```
dbms_output.put_line ( DBMS_UTILITY.FORMAT_ERROR_STACK() );
```

```
end t12;
```

```
/
```

```
drop table eveniment;
```

```
alter table eveniment add testare number;
```

```
select * from eveniment;
```

```
select * from actiuni;
```

The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with navigation links: Home, My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet". The code entered is:

```
11    end if;
12
13    if syp event = 'DROP' then
14        raise eroare;
15    end if;
16
17 exception
18    when eroare then
19        raise_application_error(-20005, 'Nu puteti sterge tabele din baza de date!');
20    when others then
21        dbms_output.put_line ( DBMS_UTILITY.FORMAT_ERROR_STACK() );
22
23
24 drop table eveniment;
25 alter table eveniment add testare number;
26
27 select * from eveniment;
28
29 select * from actiuni;
30
```

The output pane shows the results of the execution:

- Line 24: Table created.
- Line 25: Trigger created.
- Line 26: ORA-04008: error during execution of trigger 'SQ_MQTUBYAFNQRBMNFQOFKRYHT.T12' ORA-06512: at line 14
- Line 27: Table altered.
- Line 28: (empty)
- Line 29: (empty)

At the bottom, there's a footer with the text: "2023 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤ using Oracle APEX - Privacy - Terms of Use".

The screenshot shows the Oracle Live SQL interface. In the SQL Worksheet pane, the following PL/SQL code is displayed:

```

11    end if;
12
13    if sysevent = 'DROP' then
14        raise erroare;
15    end if;
16
17    exception
18        when erroare then
19            raise_application_error(-20005, 'Nu puteti sterge tablele din baza de date!');
20        when others then
21            dbms_output.put_line ( DBMS_UTILITY.FORMAT_ERROR_STACK() );
22    end;
23
24    drop table eveniment;
25    alter table eveniment add testare number;
26
27    select * from eveniment;
28
29    select * from actiuni;
30

```

Below the code, a message states "Table altered." A table named "eveniment" is shown with the following data:

ID_EVENTIMENT	ID_SPECTACOL	ID_LOCATIE	ID_SALA	ID_ORGANIZATOR	DATA_EVENTIMENT	ORA_START	ORA_STOP	TESTARE
1	9	7	1	9	23-DEC-22	19:30	21:00	-
2	5	8	1	5	01-JUL-22	17:00	19:30	-
3	7	4	2	7	06-AUG-22	14:30	17:30	-
4	25	9	1	5	13-AUG-22	16:15	19:00	-

At the bottom of the worksheet, there is a note: "2023 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤️ using Oracle APEX - Privacy - Terms of Use".

This screenshot shows the same Oracle Live SQL interface as the previous one, but with a different output. The table "eveniment" now has a "Download CSV" button below it. The CSV file contains the following data:

UTILIZATOR	DATA_ACTIUNE
APEX_PUBLIC_USER	12-JAN-23

At the bottom of the worksheet, the same note is present: "2023 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤️ using Oracle APEX - Privacy - Terms of Use".

13. Definiți un pachet care să conțină toate obiectele definite în cadrul proiectului.

create or replace package pack13 as

```

procedure ex6;
procedure ex7;
function ex8(p_numere utilizator.nume%type) return plata.suma%type;
procedure ex9(p_numere utilizator.nume%type);
end pack13;
/

```

create or replace package body pack13 as

procedure ex6 is

```
type rec is record (cod bilet.id_bilet%type,
                     eveniment bilet.id_eveniment%type,
                     loc bilet.id_loc%type,
                     sala bilet.id_sala%type,
                     locatie bilet.id_locatie%type,
                     rezervare bilet.id_rezervare%type,
                     pret bilet.pret%type,
                     stare bilet.stare%type);

type tablou_indexat is table of rec index by pls_integer;

type tablou_imbricat is table of bilet.stare%type;

de_actualizat tablou_indexat;
date_vechi tablou_imbricat := tablou_imbricat();
date_noi tablou_imbricat := tablou_imbricat();
rez pls_integer := 0;
plat pls_integer := 0;
aux rezervare.stare%type;
exceptie exception;

begin
  select stare bulk collect into date_vechi
  from bilet;
  
  delete
  from bilet b
```

```
where (select data_eveniment from eveniment e where e.id_eveniment =
b.id_eveniment)<sysdate and stare != 2 and stare != 3

returning b.id_bilet, b.id_eveniment, b.id_loc, b.id_sala, b.id_locatie, b.id_rezervare, b.pret,
b.stare bulk collect into de_actualizat;

if de_actualizat.count = 0 then
    raise exceptie;
end if;

for i in de_actualizat.first..de_actualizat.last loop
    if de_actualizat(i).rezervare is null then
        de_actualizat(i).stare := 2;
    else
        select r.stare into aux
        from rezervare r
        where r.id_rezervare = de_actualizat(i).rezervare;

        if aux = 0 then
            de_actualizat(i).stare := 2;
        else
            de_actualizat(i).stare := 3;
        end if;
    end if;

    insert into bilet
        values (de_actualizat(i).cod, de_actualizat(i).eveniment, de_actualizat(i).loc,
de_actualizat(i).sala, de_actualizat(i).locatie, de_actualizat(i).rezervare, de_actualizat(i).pret,
de_actualizat(i).stare);
end loop;
```

```
select stare bulk collect into date_noi
from bilet;

for i in date_vechi.first..date_vechi.last loop
    if date_vechi(i) = 1 then
        rez := rez + 1;
        if date_noi(i) = 3 then
            plat := plat + 1;
        end if;
    end if;
end loop;

dbms_output.put_line(round(plat/rez*100,2) || '% din biletele pentru rezervari trecute au fost
platite.');
```

exception

```
when exceptie then
    dbms_output.put_line('Nu exista date de actualizat.');
```

```
end ex6;
```

procedure ex7 is

```
v_spec spectacol.id_spectacol%type;
v_nume spectacol.nume%type;
v_rezervari pls_integer;
v_ant pls_integer;
v_indice pls_integer := 0;
v_util utilizator.nume%type;
```

--cursor parametrizat

```
cursor utilizatori(parametru spectacol.id_spectacol%type) is
    select unique nume
        from utilizator u
        join rezervare r on u.id_utilizator = r.id_utilizator
        where r.id_rezervare in (
            select b.id_rezervare
                from bilet b
                join eveniment e on b.id_eveniment = e.id_eveniment
                where e.id_spectacol = parametru);
begin
```

v_indice := 0;

--cursor implicit cu subcereri

```
for spec in (select s.id_spectacol cod, s.nume nume, count(id_rezervare) rezervari
```

from spectacol s

left join eveniment e on s.id_spectacol = e.id_spectacol

left join bilet b on e.id_eveniment = b.id_eveniment

group by s.id_spectacol, s.nume

order by rezervari desc)

loop

v_spec := spec.cod;

v_nume := spec.nume;

v_rezervari := spec.rezervari;

if v_indice = 0 or v_ant != v_rezervari then

v_indice := v_indice + 1;

```
    dbms_output.put_line(' ');
    dbms_output.put_line(v_indice || '-----');
else
    dbms_output.put_line('-----');
end if;
dbms_output.put_line(v_nume || ' - ' || v_rezervari || ' rezervari:');
open utilizatori(v_spec);
loop
    fetch utilizatori into v_util;
    exit when utilizatori%notfound;
    dbms_output.put_line(v_util);
end loop;
close utilizatori;
v_ant := v_rezervari;
end loop;
end ex7;
```

```
function ex8(p_nume utilizator.nume%type)
```

```
return plata.suma%type
```

```
is
```

```
    resultat plata.suma%type;
```

```
    verif_util number;
```

```
    no_util exception;
```

```
    too_many_util exception;
```

```
begin
```

```
    select count(*) into verif_util
```

```
    from utilizator
```

```
where upper(nume) = upper(p_nume);

if verif_util = 0 then
    raise no_util;
elsif verif_util > 1 then
    raise too_many_util;
end if;

select sum(suma) into rezultat
from utilizator u
left join rezervare r on r.id_utilizator=u.id_utilizator
left join plata p on p.id_rezervare=r.id_rezervare
where upper(u.nume) = upper(p_nume) and r.stare = 1;

return rezultat;

exception
when no_util then
    raise_application_error(-20000, 'Nu exista utilizatori cu acest nume!');
when too_many_util then
    raise_application_error(-20001, 'Mai mult de un utilizator cu acest nume!');
end ex8;

procedure ex9(p_nume utilizator.nume%type)
is
    verif_nume number;
    nume_reducere reducere.nume%type;
    data_plata plata.data_plata%type;
```

```
no_util exception;

too_many_util exception;

begin

    select count(*)

    into verif_nume

    from utilizator u

    where upper(u.nume)=upper(p_nume);

    if verif_nume = 0 then

        raise no_util;

    elsif verif_nume > 1 then

        raise too_many_util;

    end if;

select r.nume "NUME REDUCERE", p.data_plata "ULTIMA UTILIZARE"

into nume_reducere, data_plata

from reducere r

join implica i on i.id_reducere=r.id_reducere

join plata p on i.id_plata=p.id_plata

join rezervare rez on rez.id_rezervare=p.id_rezervare

join utilizator u on rez.id_utilizator=u.id_utilizator

where p.data_plata = (select max(p1.data_plata)

from reducere r1

join implica i1 on i1.id_reducere=r1.id_reducere

join plata p1 on i1.id_plata=p1.id_plata

where r1.id_reducere=r.id_reducere)

and upper(u.nume)=upper(p_nume)
```

```
order by months_between(sysdate, p.data_plata);

dbms_output.put_line('REDUCERE: ' || nume_reducere);
dbms_output.put_line('DATA: ' || data_plata);

exception
when no_data_found then
    raise_application_error(-20000, 'Utilizatorul nu a dispus de nicio reducere!');
when too_many_rows then
    raise_application_error(-20001, 'Mai multe reduceri in ultima plata!');
when no_util then
    raise_application_error(-20002, 'Nu exista utilizator cu acest nume!');
when too_many_util then
    raise_application_error(-20003, 'Mai mult de un utilizator cu acest nume!');
end ex9;

end pack13;
/

```

The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with navigation links: Home, My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet". The code is displayed in a syntax-highlighted editor. At the bottom of the worksheet, two messages are shown: "Package created." and "Package Body created.". The bottom right corner of the interface displays the footer: "2023 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym" and "Built with ❤ using Oracle APEX - Privacy - Terms of Use".

14. Definiți un pachet care să includă tipuri de date complexe și obiecte necesare pentru acțiuni integrate.

Pachetul următor are utilitatea prelucrării unor anumite informații despre fiecare utilizator. Pentru fiecare utilizator voi afișa lista spectacolelor la care a facut rezervări și statusul lui pe platformă: UTILIZATOR FIDEL(a efectuat cel puțin o plată)/UTILIZATOR NORMAL(a plasat rezervări dar nu a efectuat plăți pe platformă). În cazul în care nu a plasat nicio rezervare, este considerat UTILIZATOR INACTIV și este șters de pe platformă. Ca tip de date complex, voi folosi un vector de vectori în care voi stoca lista spectacolelor cu rezervări pentru fiecare utilizator.

```
create or replace package info_util as
```

```
procedure init_spect;
```

```
function activitate(id_util number) return varchar2;
```

```
function status(id_util number) return varchar2;
```

```
procedure gestiune_date;
```

```
procedure util_inactiv(id_util number);
```

```
procedure util_activ(id_util number);
```

```
end info_util;
```

```
/
```

```
create or replace package body info_util as
```

```
type list_spec is varray(100) of spectacol.nume%type;
```

```
type vect_list_spec is varray(100) of list_spec;
```

```
spectacole vect_list_spec := vect_list_spec();
```

```
type vect_nume is varray(1000) of utilizator.nume%type;
```

```
nume_util vect_nume := vect_nume();
```



```
procedure init_spect
```

```
is
```

```
v_nr number;
```

```
exista_rez number;
```

```
begin
```

```
select count(*)
```

```
into v_nr
from utilizator;

nume_util.extend(v_nr);
spectacole.extend(v_nr);

for i in 1..v_nr loop
    spectacole(i) := list_spec();

    select nume
        into nume_util(i)
        from utilizator
        where id_utilizator = i;

    select count(*)
        into exista_rez
        from rezervare
        where id_utilizator = i;

    if exista_rez != 0 then
        select s.nume bulk collect into spectacole(i)
        from rezervare r
        join bilet b on r.id_rezervare = b.id_rezervare
        join eveniment e on b.id_eveniment = e.id_eveniment
        join spectacol s on e.id_spectacol = s.id_spectacol
        where r.id_utilizator = i;
    end if;
```

```
end loop;

end init_spect;

function activitate(id_util number) return varchar2
is
    raspuns varchar2(20);
    nr_rez number;
begin
    select count(*)
        into nr_rez
        from rezervare
        where id_utilizator = id_util;

    if nr_rez = 0 then
        raspuns := 'UTILIZATOR INACTIV';
    else
        raspuns := 'UTILIZATOR ACTIV';
    end if;

    return raspuns;
end activitate;

function status(id_util number) return varchar2
is
    raspuns varchar2(20);
begin
    select case when nvl(sum(p.suma),'0')=0 then 'UTILIZATOR NORMAL' else 'UTILIZATOR FIDEL'
    end
```

```
    into raspuns

    from utilizator u

    left join rezervare r on r.id_utilizator=u.id_utilizator

    left join plata p on p.id_rezervare=r.id_rezervare

    where u.id_utilizator = id_util;

    return raspuns;

end status;

procedure util_activ(id_util number)

is

begin

    dbms_output.put_line(id_util || '-----');

    dbms_output.put_line( nume_util(id_util) || ' - ' || status(id_util));

    for i in spectacole(id_util).first..spectacole(id_util).last loop

        dbms_output.put_line('  ' || spectacole(id_util)(i));

    end loop;

    dbms_output.put_line('-----');

end util_activ;

procedure util_inactiv(id_util number)

is

begin

    delete from utilizator

    where id_utilizator=id_util;
```

```
dbms_output.put_line('-----');
dbms_output.put_line('Utilizatorul inactiv '|| id_util||' a fost sters din baza de date.');
dbms_output.put_line('-----');

end util_inactiv;

procedure gestiune_date
is
begin
init_spect();

for i in spectacole.first..spectacole.last loop
if activitate(i) = 'UTILIZATOR INACTIV' then
    util_inactiv(i);
else
    util_activ(i);
end if;
end loop;
end gestiune_date;
end info_util;
/

execute info_util.gestiune_date();

--INAINTE DE EXECUȚIE:
```

The screenshot shows the Oracle Live SQL interface. On the left, there's a sidebar with navigation links: Home, SQL Worksheet (which is selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet" and contains a code editor with the following SQL query:

```
1 select * from utilizator;
```

Below the code editor is a table with the results of the query:

ID_UTILIZATOR	NUME	PAROLA	EMAIL	NR_TELEFON
1	Lungu David	sfdstsredsi2313	lungudavid@gmail.com	0753296131
2	Birsan Constantin	wdsagreds3	birsanconstantin@hotmail.com	0793884781
3	Bancescu Alexandru	432r3trefds	bancescu_alex202@yahoo.com	0729790379
4	Dinica Andrei	frggew4	andreidini_ca4392@hotmail.com	0710448446
5	Surdu Robert	sadbhy5t	bob_ia@gmail.com	0771271926
6	Marian Cocos	mk715u6yr5etr	maarian_@hotmail.com	0706377531
7	Ungureanu Cristian	kie3jhr24	cristian_342_ed@gmail.com	0702498499

At the bottom of the worksheet, there's a "Download CSV" button and a footer note: "2023 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym".

--DUPA EXECUȚIE:

The screenshot shows the Oracle Live SQL interface after executing a PL/SQL block. The code in the editor is:

```
106 if activitate(i) = 'UTILIZATOR INACTIV' then
107   util_inactiv(i);
108 else
109   | util_activ(i);
110 end if;
111 end loop;
112 end gestiune_date;
113 end info_util;
114 /
115
116 execute info_util.gestiune_date();
```

The output window shows the results of the execution:

```
Package Body created.
Statement processed.
Utilizatorul inactiv i a fost sters din baza de date.
-----
2-----
Birsan Constantin - UTILIZATOR FIDEL
Filantropica
Who's Afraid of Virginia Woolf?
Who's Afraid of Virginia Woolf?
Filantropica
-----
3-----
Bancescu Alexandru - UTILIZATOR FIDEL
Hooverphonic @ Bucuresti
Hooverphonic @ Bucuresti
Hooverphonic @ Bucuresti
Elinphonic
```

At the bottom of the worksheet, there's a footer note: "2023 Oracle - Live SQL 22.4.1, running Oracle Database 19c EE Extreme Perf - 19.17.0.0.0 - Database Documentation - Ask Tom - Dev Gym".

Ciocan Alexandra-Diana, grupa 232

Live SQL

SQL Worksheet

```
106      if activitate(i) = 'UTILIZATOR INACTIV' then
107          util_inactiv(i);
108      else
109          |_ util_activ(i);
110      end if;
111      end loop;
112      end gestiune_date;
113  end info_util;
114 /
115
116 execute info_util.gestiune_date();
```

Utilizatorul inactiv 5 a fost sters din baza de date.

Marian Cocos - UTILIZATOR FIDEL
La Vie en Rose
Who's Afraid of Virginia Woolf?
Who's Afraid of Virginia Woolf?
The Glass Menagerie
The Glass Menagerie
The Glass Menagerie

Utilizatorul inactiv 7 a fost sters din baza de date.

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Live SQL

SQL Worksheet

```
123 /
124
125 execute info_util.gestiune_date();
126
127 select * from utilizator;
```

The Glass Menagerie
The Glass Menagerie

Utilizatorul inactiv 7 a fost sters din baza de date.

ID_UTILIZATOR	NUME	PAROLA	EMAIL	NR_TELEFON
2	Birsan Constantin	wdsagreds3	birsanconstantin@hotmail.com	0793884781
3	Bancescu Alexandru	432r3trefds	bancescu_alex20@yahoo.com	0729790379
4	Dinica Andrei	frggew4	andreidini_ca4392@hotmail.com	0710448446
6	Marian Cocos	mk7i5u6yr5etr	maarian_@hotmail.com	0706377531

Download CSV

4 rows selected.

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