Gestionarea bazei de date a brandului Oysho

Sisteme de gestiune a bazelor de date

Aldea Alexia Elena

Grupa 244

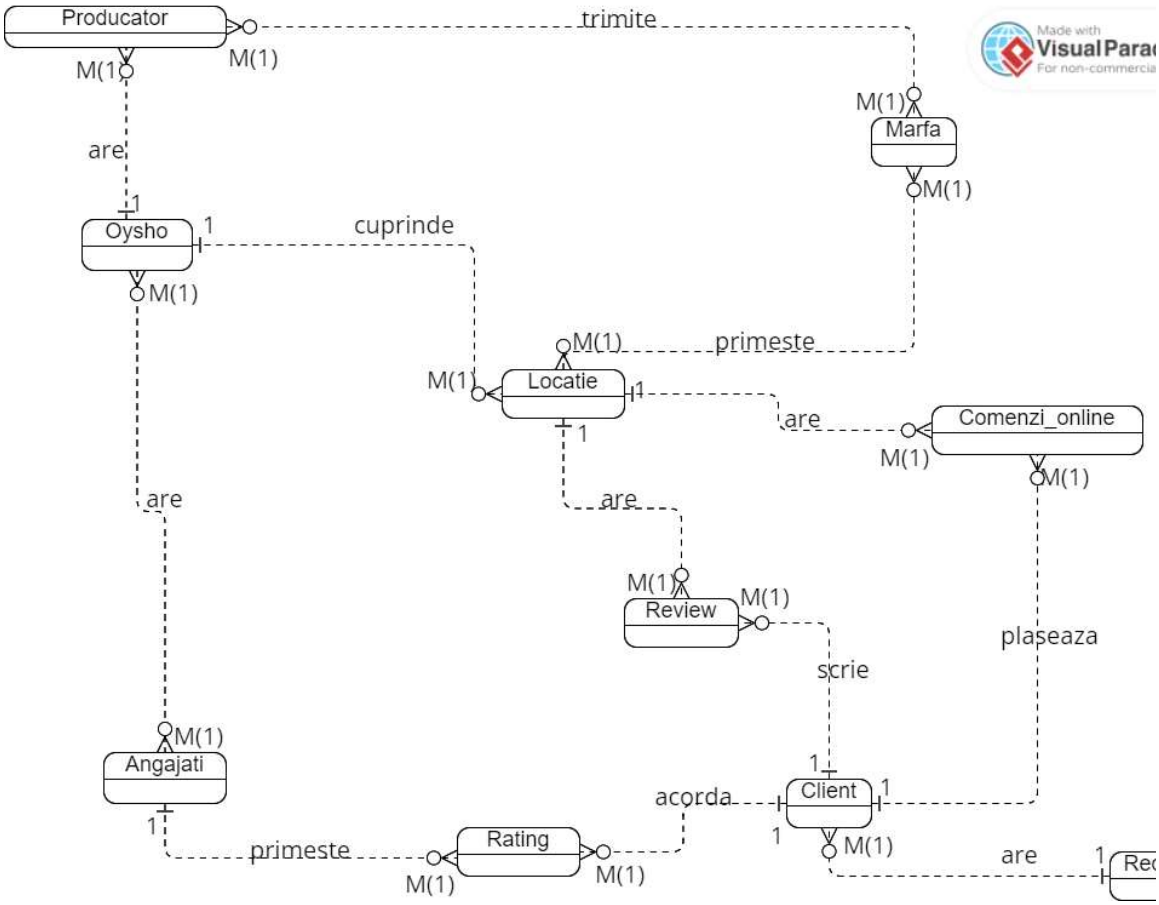
1. Prezentați pe scurt baza de date (utilitatea ei).

In acest proiect voi realiza baza de date a lantului de magazine Oysho. In primul rand, acesta are unul sau mai multi producatori, ce ii livreaza haine. Desigur, unele haine pot veni cu un defect din fabricatie la marfa, urmand ca acestea sa fie trimise inapoi la producator de catre magazine.

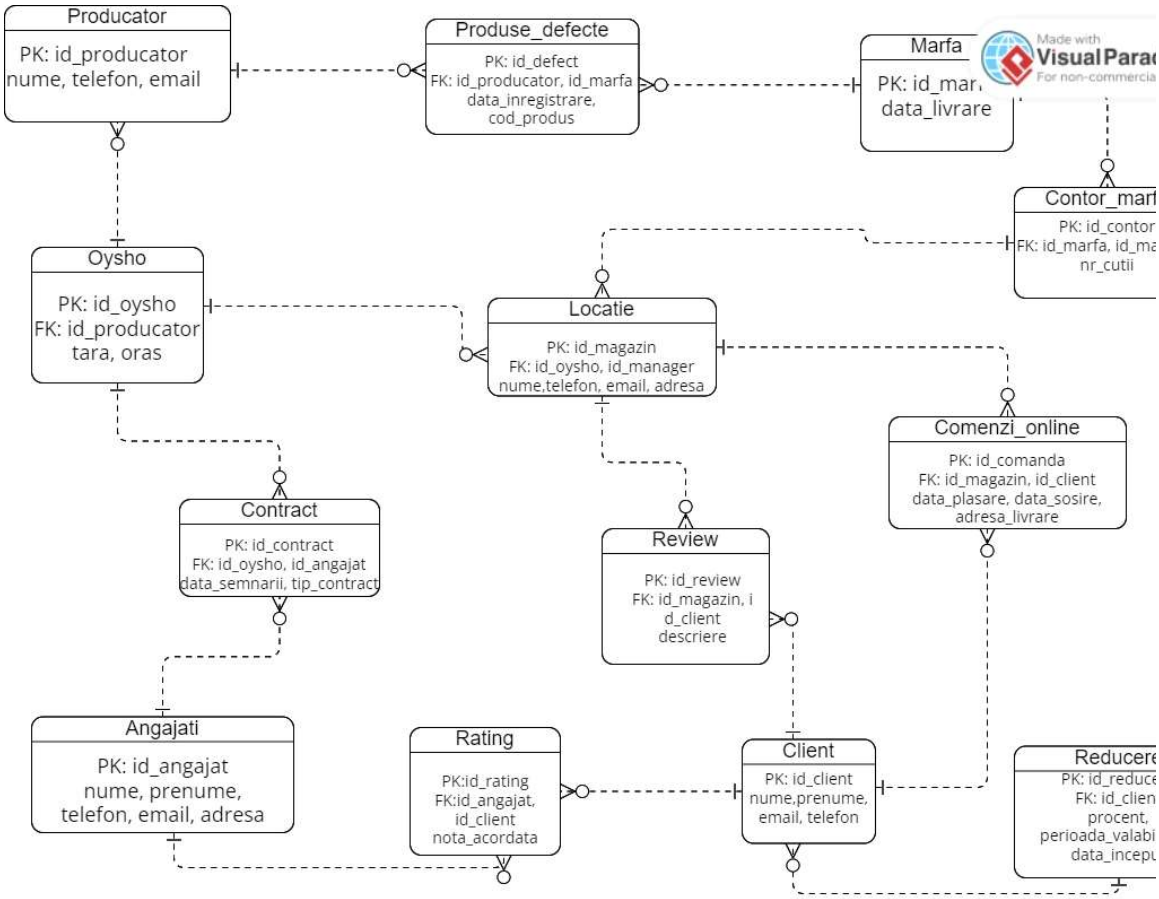
Brandul Oysho are unul sau mai multe contracte cu mai multi angajati. Pentru fiecare angajat vom retine cateva date de baza despre el, iar in contract, la fel. Un angajat lucreaza la un singur mall, dintr-o singura locatie. Brandul Oysho are magazine in diferite locuri ale lumii, in mai multe mall-uri din orase. Fiecare magazin primeste marfa, printr-un contor, care ii spune cate cutii se vor livra in ziua X. De asemenea, un magazin Oysho poate primi si comenzi online, de care trebuie sa se ocupe (sa le impacheteze).

Clientii care viziteaza un magazin Oysho, ii pot lasa un review, iar angajatilor, o nota, pentru a-i ajuta pe viitorii clienti sa isi creeze o parere despre experienta din fiecare magazin Oysho si pentru a-l vizita pec el potrivit pentru ei. De asemenea, un client poate avea si o reducere, incepand cu o anumita data si cu o perioada de X ani (decisa de Oysho, in functie de cat de multe cumparaturi face la acest brand).

2. Realizați diagrama entitate-relație(ERD).



3. Pornind de la diagrama entitate-relație realizați diagrama conceptuală a modelului propus, integrând toate atributele necesare.



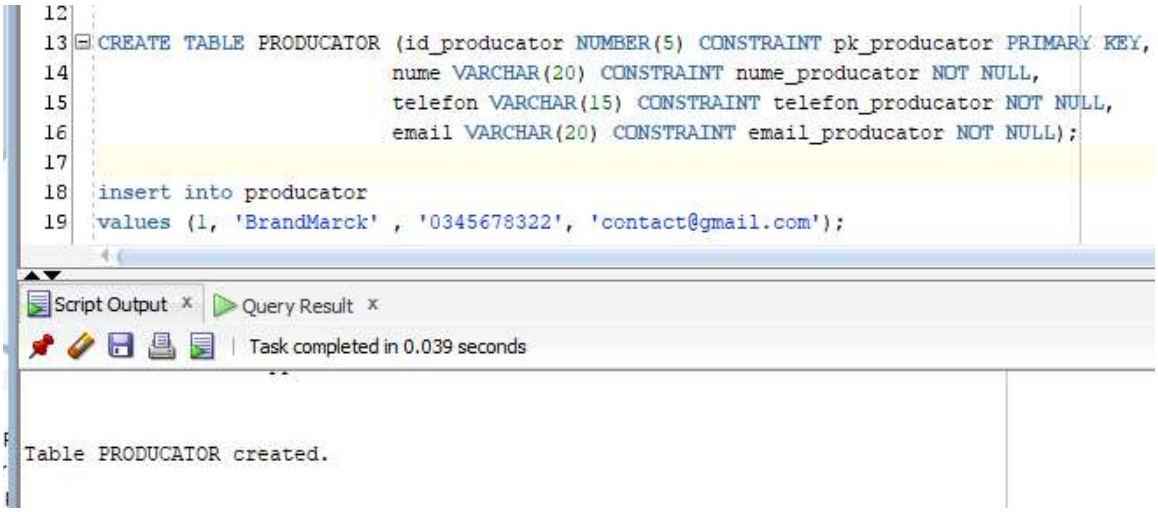
4. Implementați în Oracle diagrama conceptuală realizată: definiți toate tabelele, implementând toate constrângerile de integritate necesare (chei primare, cheile externe etc).

CREATE TABLE PRODUCATOR (id_producator NUMBER(5) CONSTRAINT pk_producator PRIMARY KEY,

nume VARCHAR(20) CONSTRAINT nume_producator NOT NULL,

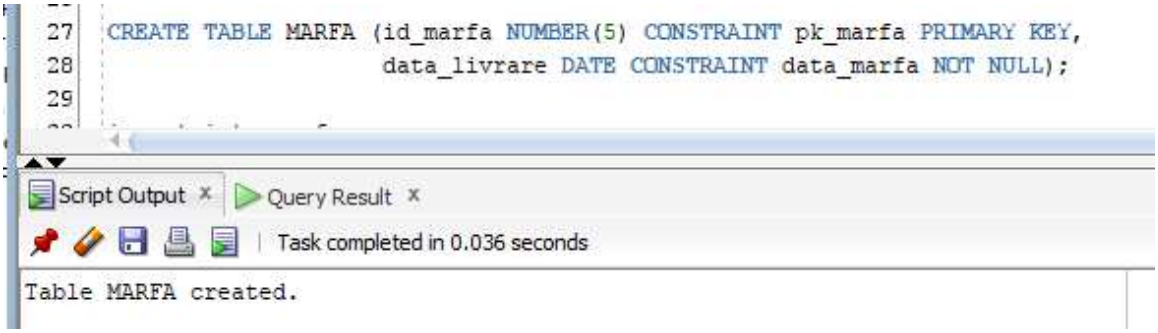
telefon VARCHAR(15) CONSTRAINT telefon_producator NOT NULL,

email VARCHAR(20) CONSTRAINT email_producator NOT NULL);



CREATE TABLE MARFA (id_marfa NUMBER(5) CONSTRAINT pk_marfa PRIMARY KEY,

data_livrare DATE CONSTRAINT data_marfa NOT NULL);



CREATE TABLE PRODUSE_DEFECTE(id_defect NUMBER(5) CONSTRAINT pk_prod_defect PRIMARY KEY,

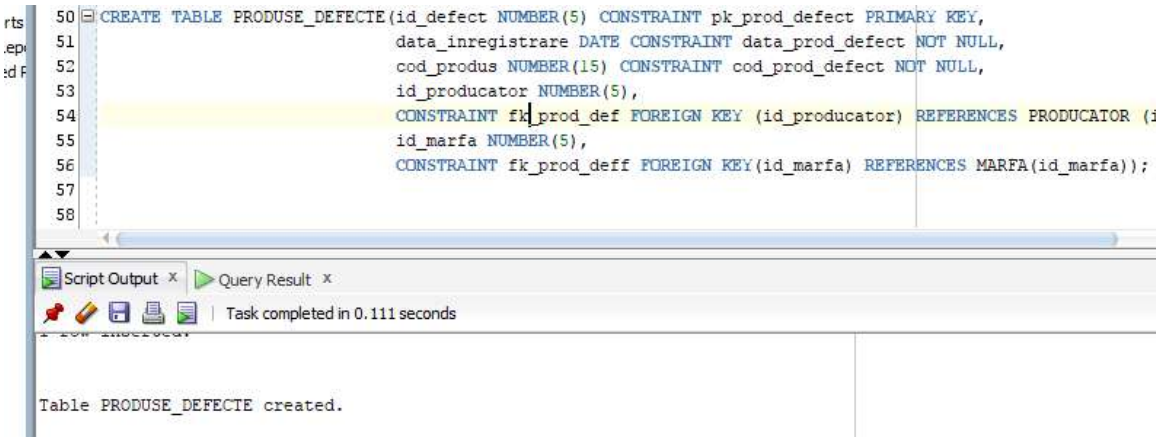
data_inregistrare DATE CONSTRAINT data_prod_defect NOT NULL,

cod_produs NUMBER(15) CONSTRAINT cod_prod_defect NOT NULL,

id_producator NUMBER(5),

CONSTRAINT fk_prod_def FOREIGN KEY (id_producator) REFERENCES PRODUCATOR (id_producator),

id_marfa NUMBER(5), CONSTRAINT fk_prod_deff FOREIGN KEY(id_marfa) REFERENCES MARFA(id_marfa));

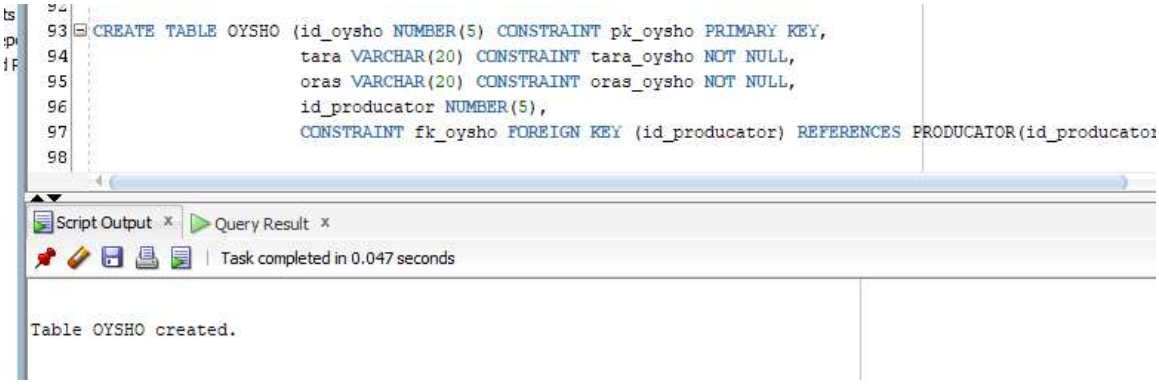


CREATE TABLE OYSHO (id_oysho NUMBER(5) CONSTRAINT pk_oysho PRIMARY KEY,

tara VARCHAR(20) CONSTRAINT tara_oysho NOT NULL,

oras VARCHAR(20) CONSTRAINT oras_oysho NOT NULL,

id_producator NUMBER(5), CONSTRAINT fk_oysho FOREIGN KEY (id_producator) REFERENCES PRODUCATOR(id_producator));



CREATE TABLE ANGAJATI(id_angajat NUMBER(5) CONSTRAINT pk_angajat PRIMARY KEY,

nume_angajat VARCHAR(50) CONSTRAINT nume_angajat NOT NULL,

prenume_angajat VARCHAR(50) CONSTRAINT prenume_angajat NOT NULL,

telefon_angajat VARCHAR(50) CONSTRAINT telefon_angajat NOT NULL,

email_angajat VARCHAR(50) CONSTRAINT email_angajat NOT NULL,

adresa_angajat VARCHAR(50) CONSTRAINT adresa_angajat NOT NULL);

```
120 CREATE TABLE ANGAJATI(id_angajat NUMBER(5) CONSTRAINT pk_angajat PRIMARY KEY,
121                       nume_angajat VARCHAR(50) CONSTRAINT nume_angajat NOT NULL,
122                       prenume_angajat VARCHAR(50) CONSTRAINT prenume_angajat NOT NULL,
123                       telefon_angajat VARCHAR(50) CONSTRAINT telefon_angajat NOT NULL,
124                       email_angajat VARCHAR(50) CONSTRAINT email_angajat NOT NULL,
125                       adresa_angajat VARCHAR(50) CONSTRAINT adresa_angajat NOT NULL);
126
127
```

Script Output | Query Result

Task completed in 0.241 seconds

```
Commit complete.


Table ANGAJATI created.
```

CREATE TABLE LOCATIE (id_magazin NUMBER(5) CONSTRAINT pk_locatie PRIMARY KEY,

nume_magazin VARCHAR(20) CONSTRAINT nume_locatie NOT NULL,

telefon VARCHAR(20) CONSTRAINT telefon_magazin NOT NULL,

email VARCHAR(50) CONSTRAINT email_magazin NOT NULL,

adresa VARCHAR(100) CONSTRAINT adresa_magazin NOT NULL,

id_oysho NUMBER(5), CONSTRAINT fk_magazin FOREIGN KEY (id_oysho) REFERENCES OYSHO (id_oysho),

id_manager NUMBER(5), CONSTRAINT fk_magg FOREIGN KEY (id_manager) REFERENCES ANGAJATI(id_angajat));

```
129 CREATE TABLE LOCATIE (id_magazin NUMBER(5) CONSTRAINT pk_locatie PRIMARY KEY,
130                       nume_magazin VARCHAR(20) CONSTRAINT nume_locatie NOT NULL,
131                       telefon VARCHAR(20) CONSTRAINT telefon_magazin NOT NULL,
132                       email VARCHAR(50) CONSTRAINT email_magazin NOT NULL,
133                       adresa VARCHAR(100) CONSTRAINT adresa_magazin NOT NULL,
134                       id_oysho NUMBER(5),
135                       CONSTRAINT fk_magazin FOREIGN KEY (id_oysho) REFERENCES OYSHO (id_oysho),
136                       id_manager NUMBER(5),
137                       CONSTRAINT fk_magg FOREIGN KEY (id_manager) REFERENCES ANGAJATI(id_angajat
138
```

Script Output | Query Result

Task completed in 0.047 seconds

```
Table LOCATIE created.
```

CREATE TABLE CONTRACT (id_contract NUMBER(5) CONSTRAINT pk_contr PRIMARY KEY,

data_semnarii DATE CONSTRAINT data_contract NOT NULL,

tip_contract VARCHAR(20) CONSTRAINT tip_contract NOT NULL,

id_oysho NUMBER(5), CONSTRAINT fk_contr_oysho FOREIGN KEY (id_oysho) REFERENCES OYSHO(id_oysho),

id_angajat NUMBER(5), CONSTRAINT fk_contr_angajat FOREIGN KEY(id_angajat) REFERENCES ANGAJATI(id_angajat));

```
178 CREATE TABLE CONTRACT (id_contract NUMBER(5) CONSTRAINT pk_contr PRIMARY KEY,
179                        data_semnarii DATE CONSTRAINT data_contract NOT NULL,
180                        tip_contract VARCHAR(20) CONSTRAINT tip_contract NOT NULL,
181                        id_oysho NUMBER(5),
182                        CONSTRAINT fk_contr_oysho FOREIGN KEY (id_oysho) REFERENCES OYSHO(id_oysho),
183                        id_angajat NUMBER(5),
184                        CONSTRAINT fk_contr_angajat FOREIGN KEY(id_angajat) REFERENCES ANGAJATI(id_anga
185
```

Script Output | Task completed in 0.162 seconds

```
*Action:   Specify a unique constraint name for the constraint.

Table CONTRACT created.
```

CREATE TABLE CONTOR_MARFA(id_contor NUMBER(5) CONSTRAINT pk_contor PRIMARY KEY,

nr_cutii NUMBER(5) CONSTRAINT cutii_contor NOT NULL,

id_marfa NUMBER(5), CONSTRAINT fk_contor FOREIGN KEY (id_marfa) REFERENCES MARFA (id_marfa),

id_magazin NUMBER(5), CONSTRAINT fk_contorr FOREIGN KEY (id_magazin) REFERENCES LOCATIE(id_magazin));

```
237
238 CREATE TABLE CONTOR_MARFA(id_contor NUMBER(5) CONSTRAINT pk_contor PRIMARY KEY,
239                           nr_cutii NUMBER(5) CONSTRAINT cutii_contor NOT NULL,
240                           id_marfa NUMBER(5),
241                           CONSTRAINT fk_contor FOREIGN KEY (id_marfa) REFERENCES MARFA (id_marfa),
242                           id_magazin NUMBER(5),
243                           CONSTRAINT fk_contorr FOREIGN KEY (id_magazin) REFERENCES LOCATIE(id_magazi
244
245
```

Script Output | Query Result | Task completed in 0.963 seconds

```
Commit complete.


Table CONTOR_MARFA created.
```

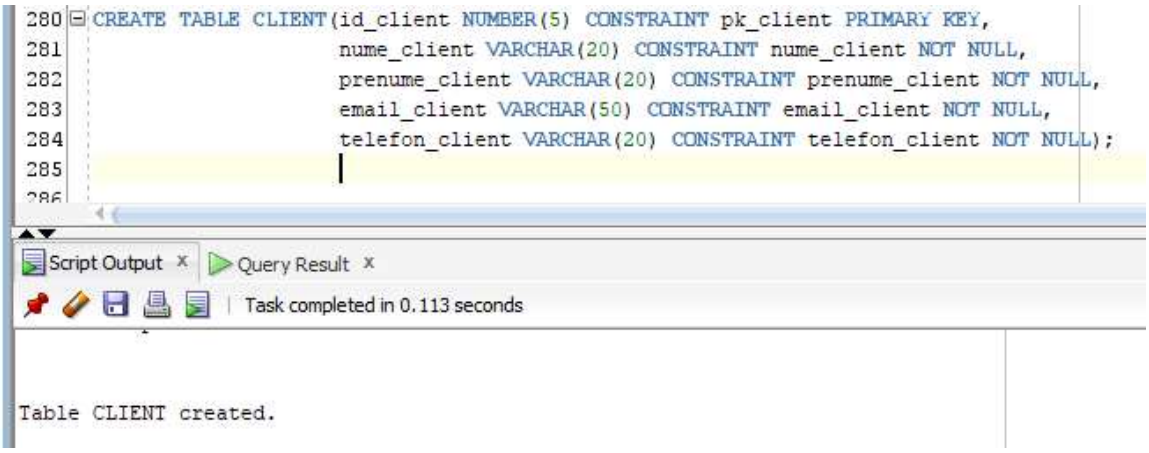
CREATE TABLE CLIENT(id_client NUMBER(5) CONSTRAINT pk_client PRIMARY KEY,

nume_client VARCHAR(20) CONSTRAINT nume_client NOT NULL,

prenume_client VARCHAR(20) CONSTRAINT prenume_client NOT NULL,

email_client VARCHAR(50) CONSTRAINT email_client NOT NULL,

telefon_client VARCHAR(20) CONSTRAINT telefon_client NOT NULL);



CREATE TABLE COMENZI_ONLINE(id_comanda NUMBER(5) CONSTRAINT pk_comanda PRIMARY KEY,

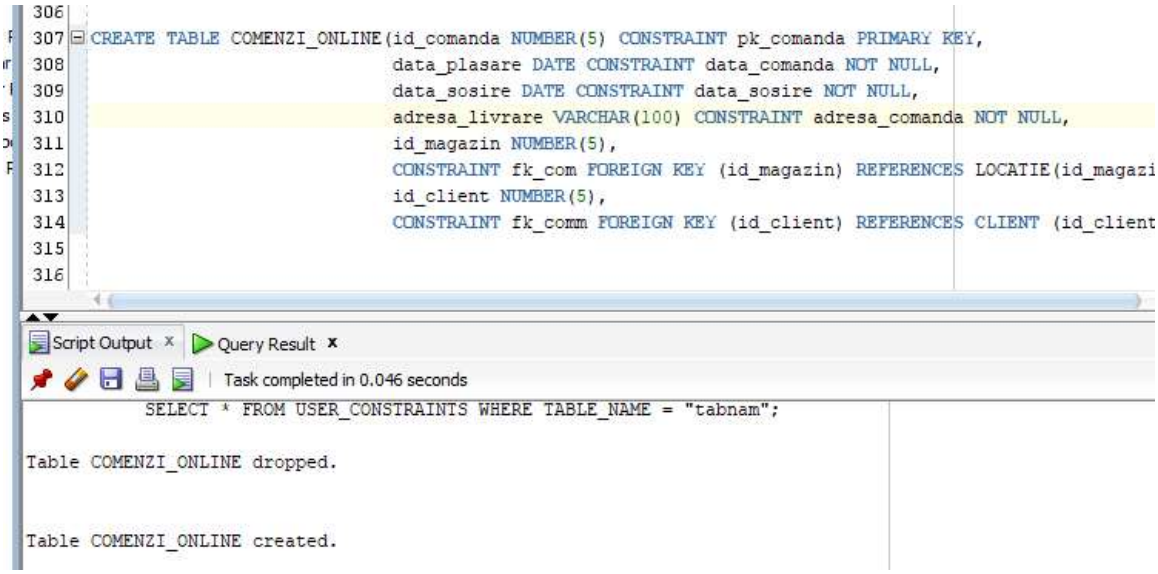
data_plasare DATE CONSTRAINT data_comanda NOT NULL,

data_sosire DATE CONSTRAINT data_sosire NOT NULL,

adresa_livrare VARCHAR(100) CONSTRAINT adresa_comanda NOT NULL,

id_magazin NUMBER(5), fk_com FOREIGN KEY (id_magazin) REFERENCES LOCATIE(id_magazin),

id_client NUMBER(5), CONSTRAINT fk_comm FOREIGN KEY (id_client) REFERENCES CLIENT (id_client));

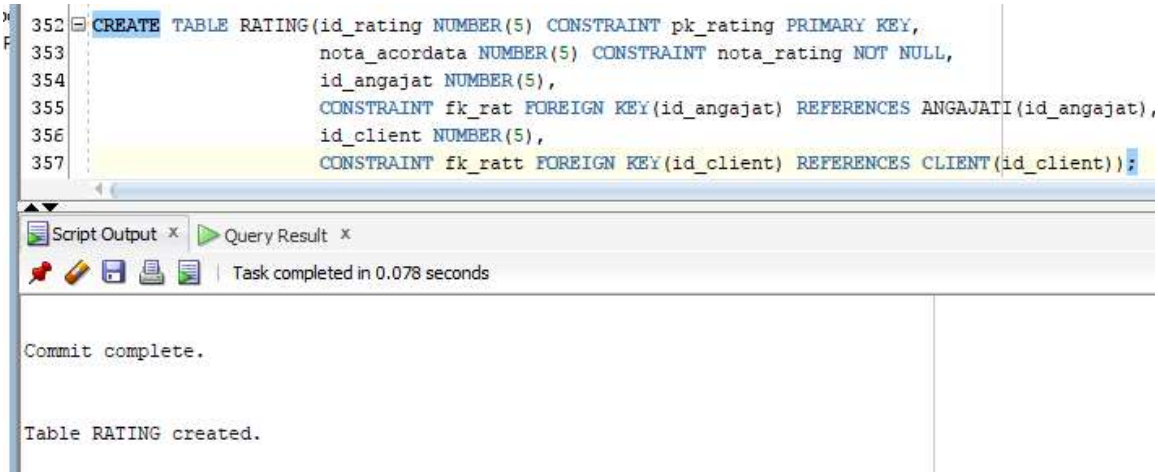


CREATE TABLE RATING(id_rating NUMBER(5) CONSTRAINT pk_rating PRIMARY KEY,

nota_acordata NUMBER(5) CONSTRAINT nota_rating NOT NULL,

id_angajat NUMBER(5), CONSTRAINT fk_rat FOREIGN KEY(id_angajat) REFERENCES ANGAJATI(id_angajat),

id_client NUMBER(5), CONSTRAINT fk_ratt FOREIGN KEY(id_client) REFERENCES CLIENT(id_client));

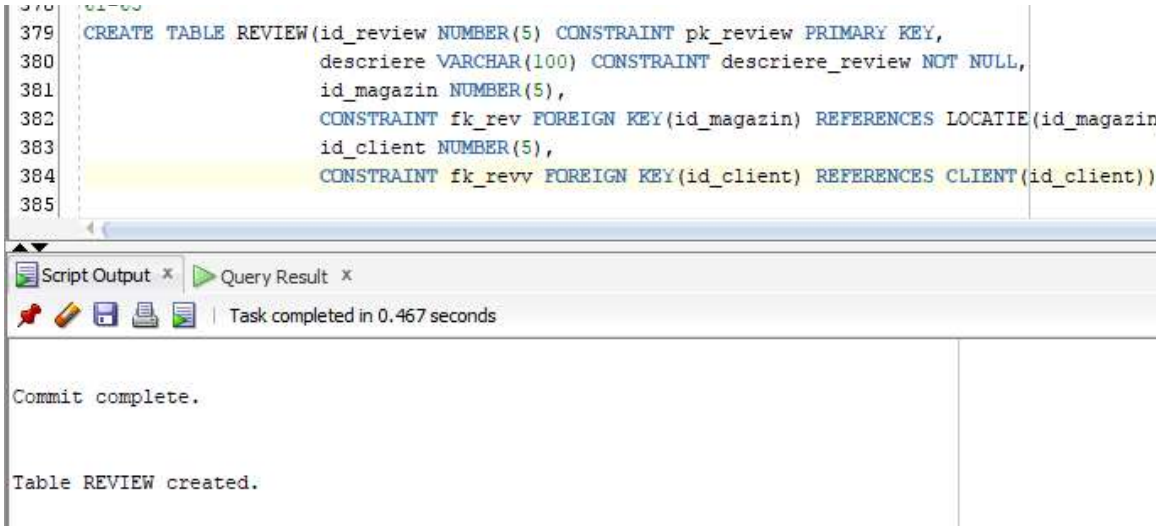


CREATE TABLE REVIEW(id_review NUMBER(5) CONSTRAINT pk_review PRIMARY KEY,

descriere VARCHAR(100) CONSTRAINT descriere_review NOT NULL,

id_magazin NUMBER(5), CONSTRAINT fk_rev FOREIGN KEY(id_magazin) REFERENCES LOCATIE(id_magazin),

id_client NUMBER(5), CONSTRAINT fk_revv FOREIGN KEY(id_client) REFERENCES CLIENT(id_client));



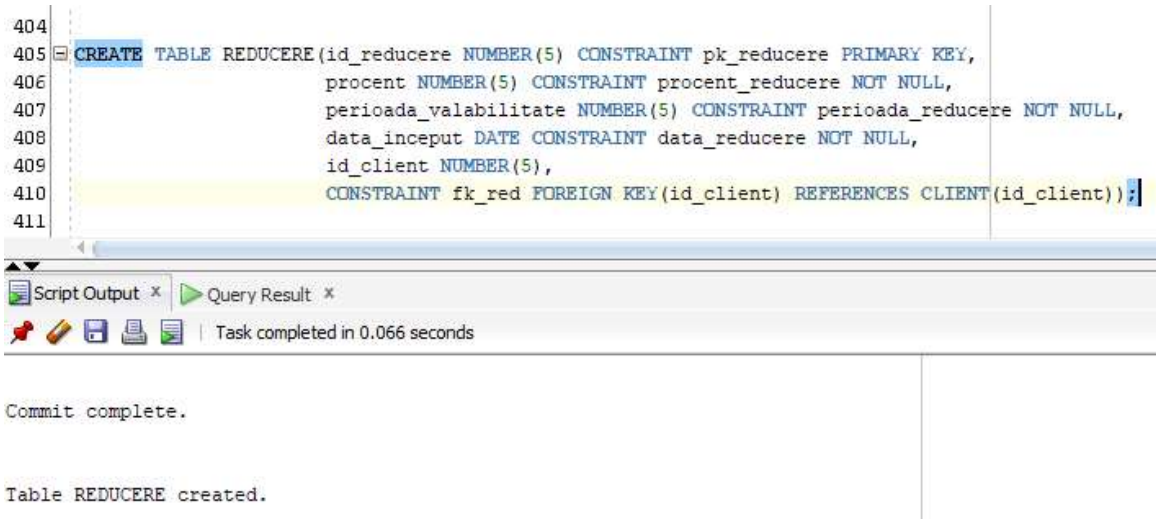
CREATE TABLE REDUCERE(id_reducere NUMBER(5) CONSTRAINT pk_reducere PRIMARY KEY,

procent NUMBER(5) CONSTRAINT procent_reducere NOT NULL,

perioada_valabilitate NUMBER(5) CONSTRAINT perioada_reducere NOT NULL,

data_inceput DATE CONSTRAINT data_reducere NOT NULL,

id_client NUMBER(5), CONSTRAINT fk_red FOREIGN KEY(id_client) REFERENCES CLIENT(id_client));



5. Adăugați informații coerente în tabelele create (minim 5 înregistrări pentru fiecare entitate independentă; minim 10 înregistrări pentru tabela asociativă).

insert into producator values (1, 'BrandMarck' , '0345678322', 'contact@gmail.com');

insert into producator values (2, 'ClothesForEveryone', '0789345655', 'clothes_1@gmail.com');

insert into producator values (3, 'MadeInMorocco', '0345687732', 'callus@yahoo.com');

insert into producator values (4, 'HommyTilfinger', '034544377', 'hommy_t@gmail.com');

insert into producator values (5, 'BugoHoss', '0456788124', 'bugo12@gmail.com');

```
insert into producator
values (1, 'BrandMarck' , '0345678322', 'contact@gmail.com');

insert into producator
values (2, 'ClothesForEveryone', '0789345655', 'clothes_1@gmail.com');

insert into producator
values (3, 'MadeInMorocco', '0345687732', 'callus@yahoo.com');

insert into producator
values (4, 'HommyTilfinger', '034544377', 'hommy_t@gmail.com');

insert into producator
values (5, 'BugoHoss', '0456788124', 'bugo12@gmail.com');

commit;
select* from producator;
```

Script Output | Query Result

SQL | All Rows Fetched: 5 in 0.002 seconds

	ID_PRODUCATOR	NUME	TELEFON	EMAIL
1	1	BrandMarck	0345678322	contact@gmail.com
2	2	ClothesForEveryone	0789345655	clothes_1@gmail.com
3	3	MadeInMorocco	0345687732	callus@yahoo.com
4	4	HommyTilfinger	034544377	hommy_t@gmail.com
5	5	BugoHoss	0456788124	bugo12@gmail.com

insert into marfa values (6, TO_DATE('15-03-2023','dd-mm-yyyy'));

insert into marfa values (7, TO_DATE('1-03-2023', 'dd-mm-yyyy'));

insert into marfa values (8, TO_DATE('15-04-2023', 'dd-mm-yyyy'));

insert into marfa values (9, TO_DATE('1-04-2023', 'dd-mm-yyyy'));

insert into marfa values (10, TO_DATE('1-05-2023','dd-mm-yyyy'));

```
30  insert into marfa
31  values (6, TO_DATE('15-03-2023','dd-mm-yyyy'));
32
33  insert into marfa
34  values (7, TO_DATE('1-03-2023', 'dd-mm-yyyy'));
35
36  insert into marfa
37  values (8, TO_DATE('15-04-2023', 'dd-mm-yyyy'));
38
39  insert into marfa
40  values (9, TO_DATE('1-04-2023', 'dd-mm-yyyy'));
41
42  insert into marfa
43  values (10, TO_DATE('1-05-2023','dd-mm-yyyy'));
44
45  commit;
46  select* from marfa;
47
48
```

Script Output | Query Result

SQL | All Rows Fetched: 5 in 0.007 seconds

	ID_MARFA	DATA_LIVRARE
1	6	15-MAR-23
2	7	01-MAR-23
3	8	15-APR-23
4	9	01-APR-23
5	10	01-MAY-23

insert into produse_defecte values(11, TO_DATE('15-01-2023','dd-mm-yyyy'), 1234670800, 1,7);

insert into produse_defecte values (12, TO_DATE('03-04-2022','dd-mm-yyyy'), 2345674456, 4, 10);

insert into produse_defecte values (13, TO_DATE('16-02-2023','dd-mm-yyyy'), 1456239485, 5, 8);

insert into produse_defecte values (14, TO_DATE('17-12-2022','dd-mm-yyyy'), 3456233466, 3, 9);

insert into produse_defecte values (15, TO_DATE('18-01-2023','dd-mm-yyyy'), 4332456800, 2, 6);

insert into produse_defecte values (16, TO_DATE('20-01-2023','dd-mm-yyyy'), 2331441500, 2, 7);

insert into produse_defecte values (17, TO_DATE('14-12-2022','dd-mm-yyyy'), 2230450678, 3, 10);

insert into produse_defecte values (18, TO_DATE('01-02-2023','dd-mm-yyyy'), 4523900800, 5, 9);

insert into produse_defecte values (19, TO_DATE('22-11-2022','dd-mm-yyyy'), 4567890957, 1, 8);

insert into produse_defecte values (20, TO_DATE('13-01-2023','dd-mm-yyyy'), 3453230567, 3,9);

```
58  insert into produse_defecte
59  values(11, TO_DATE('15-01-2023','dd-mm-yyyy'), 1234670800, 1,7);
60
61  insert into produse_defecte
62  values (12, TO_DATE('03-04-2022','dd-mm-yyyy'), 2345674456, 4, 10);
63
64  insert into produse_defecte
65  values (13, TO_DATE('16-02-2023','dd-mm-yyyy'), 1456239485, 5, 8);
66
67  insert into produse_defecte
68  values (14, TO_DATE('17-12-2022','dd-mm-yyyy'), 3456233466, 3, 9);
69
70  insert into produse_defecte
71  values (15, TO_DATE('18-01-2023','dd-mm-yyyy'), 4332456800, 2, 6);
72
73  insert into produse_defecte
74  values (16, TO_DATE('20-01-2023','dd-mm-yyyy'), 2331441500, 2, 7);
75
76  insert into produse_defecte
77  values (17, TO_DATE('14-12-2022','dd-mm-yyyy'), 2230450678, 3, 10);
78
79  insert into produse_defecte
80  values (18, TO_DATE('01-02-2023','dd-mm-yyyy'), 4523900800, 5, 9);
81
82  insert into produse_defecte
83  values (19, TO_DATE('22-11-2022','dd-mm-yyyy'), 4567890957, 1, 8);
84
85  insert into produse_defecte
86  values (20, TO_DATE('13-01-2023','dd-mm-yyyy'), 3453230567, 3,9);
87
```

Script Output x | Query Result x

SQL | All Rows Fetched: 10 in 0.009 seconds

	ID_DEFECT	DATA_INREGISTRARE	COD_PRODUS	ID_PRODUCATOR	ID_MARFA
1	11	15-JAN-23	1234670800	1	7
2	12	03-APR-22	2345674456	4	10
3	13	16-FEB-23	1456239485	5	8
4	14	17-DEC-22	3456233466	3	9
5	15	18-JAN-23	4332456800	2	6
6	16	20-JAN-23	2331441500	2	7
7	17	14-DEC-22	2230450678	3	10
8	18	01-FEB-23	4523900800	5	9
9	19	22-NOV-22	4567890957	1	8
10	20	13-JAN-23	3453230567	3	9

insert into oysho values (21, 'Romania', 'Bucuresti', 1);

insert into oysho values (22, 'Spania', 'Madrid', 4);

insert into oysho values (23, 'Italia', 'Roma', 5);

insert into oysho values (24, 'Franta', 'Paris', 2);

insert into oysho values (25, 'Portugalia', 'Lisabona', 3);

```
 99  insert into oysho
100  values (21, 'Romania', 'Bucuresti', 1);
101
102  insert into oysho
103  values (22, 'Spania', 'Madrid', 4);
104
105  insert into oysho
106  values (23, 'Italia', 'Roma', 5);
107
108  insert into oysho
109  values (24, 'Franta', 'Paris', 2);
110
111  insert into oysho
112  values (25, 'Portugalia', 'Lisabona', 3);
113
114  commit;
115  select* from oysho;
116
```

Script Output | Query Result | SQL | All Rows Fetched: 5 in 0.013 seconds

	ID_OYSHO	TARA	ORAS	ID_PRODUCATOR
1	21	Romania	Bucuresti	1
2	22	Spania	Madrid	4
3	23	Italia	Roma	5
4	24	Franta	Paris	2
5	25	Portugalia	Lisabona	3

insert into angajati values (26, 'Florea', 'Catalin', '0756345786', 'florea@gmail.com', 'Florilor 6');

insert into angajati values (27, 'Adam', 'Antonio', '0746330454', 'andy_ad@gmail.com', 'Tepes Voda 25');

insert into angajati values(28, 'Vulcanescu', 'Mircea', '0745555676', 'mirciulica123@gmail.com', 'Rezervelor 4');

insert into angajati values (29, 'Ceausu', 'Radu', '0789888543', 'radulish@yahoo.com', 'Anton Pann 32');

insert into angajati values (30, 'Craciun', 'Alexandru', '0734565723', 'christmas_alex@gmail.com', 'Mircea

Voievod 67');

insert into angajati values (36, 'Aldea', 'Alexia', '0756888187', 'alexia@gmail.com', 'Constructorilor 29');

insert into angajati values (37, 'Rosu', 'Cristina', '0731456777', 'cris_rosu@gmail.com', 'Teiul Doamnnei 12');

insert into angajati values (38, 'Luta', 'Alexandra', '0733454558', 'kiwi@gmail.com', 'Grozavesti 34');

insert into angajati values (39, 'Pentu', 'Miruna', '0735464889', 'mirus.spirus@gmail.com', 'Bucurestii Noi 1');

insert into angajati values (40, 'Bozeanu', 'Mirela', '0763888176', 'miree_boze@gmail.com', 'Morarilor 90');

```
127  insert into angajati
128  values (26, 'Florea', 'Catalin', '0756345786', 'florea@gmail.com', 'Florilor 6');
129
130  insert into angajati
131  values (27, 'Adam', 'Antonio', '0746330454', 'andy_ad@gmail.com', 'Tepes Voda 25');
132
133  insert into angajati
134  values(28, 'Vulcanescu', 'Mircea', '0745555676', 'mirciulical23@gmail.com', 'Rezervelor 4');
135
136  insert into angajati
137  values (29, 'Ceausu', 'Radu', '0789888543', 'radulish@yahoo.com', 'Anton Pann 32');
138
139  insert into angajati
140  values (30, 'Craciun', 'Alexandru', '0734565723', 'christmas_alex@gmail.com', 'Mircea Voievod 67');
141
142  insert into angajati
143  values (36, 'Aldea', 'Alexia', '0756888187', 'alexia@gmail.com', 'Constructorilor 29');
144
145  insert into angajati
146  values (37, 'Rosu', 'Cristina', '0731456777', 'cris_rosu@gmail.com', 'Teiul Doamnnei 12');
147
148  insert into angajati
149  values (38, 'Luta', 'Alexandra', '0733454558', 'kiwi@gmail.com', 'Grozavesti 34');
150
```

Script Output | Query Result

SQL | All Rows Fetched: 10 in 0.038 seconds

	ID_ANGAJAT	NUME_ANGAJAT	PRENUME_ANGAJAT	TELEFON_ANGAJAT	EMAIL_ANGAJAT	ADRESA_ANGAJAT
1	26	Florea	Catalin	0756345786	florea#gmail.com	Florilor 6
2	27	Adam	Antonio	0746330454	andy_ad@gmail.com	Tepes Voda 25
3	28	Vulcanescu	Mircea	0745555676	mirciulical23@gmail.com	Rezervelor 4
4	29	Ceausu	Radu	0789888543	radulish@yahoo.com	Anton Pann 32
5	30	Craciun	Alexandru	0734565723	christmas_alex@gmail.com	Mircea Voievod 6
6	36	Aldea	Alexia	0756888187	alexia@gmail.com	Constructorilor
7	37	Rosu	Cristina	0731456777	cris_rosu@gmail.com	Teiul Doamnnei 1
8	38	Luta	Alexandra	0733454558	kiwi@gmail.com	Grozavesti 34
9	39	Pentu	Miruna	0735464889	mirus.spirus@gmail.com	Bucurestii Noi 1
10	40	Bozeanu	Mirela	0763888176	miree_boze@gmail.com	Morarilor 90

insert into locatie values (31, 'Oysho Promenada', '031455678', 'oysho_prome@gmail.com', 'Barbu Vacarescu 8', 21, 30);

insert into locatie values (32, 'Oysho SunPLaza', '0314567890', 'oysho_sunplaza@gmail.com', 'Vacaresti 32', 22, 26);

insert into locatie values(33, 'Oysho Cotroceni', '031400500', 'oysho_afi@gmail.com', 'Cotroceni 35', 23, 29);

insert into locatie values (34, 'Oyhso Baneasa', '031444556', 'oysho_baneasa@gmail.com', 'Bucuresti-Ploiesti 14', 24, 28);

insert into locatie values (35, 'Oysho ParkLake', '031446673', 'oysho_parklake@gmail.com', 'Liviu Rebreanu 5', 25, 27);

```
157  insert into locatie
158  values (31, 'Oysho Promenada', '031455678', 'oysho_prome@gmail.com', 'Barbu Vacarescu 8', 21, 30);
159
160  insert into locatie
161  values (32, 'Oysho SunPLaza', '0314567890', 'oysho_sunplaza@gmail.com', 'Vacaresti 32', 22, 26);
162
163  insert into locatie
164  values(33, 'Oysho Cotroceni', '031400500', 'oysho_afi@gmail.com', 'Cotroceni 35', 23, 29);
165
166  insert into locatie
167  values (34, 'Oyhso Baneasa', '031444556', 'oysho_baneasa@gmail.com', 'Bucuresti-Ploiesti 14', 24, 28);
168
169  insert into locatie
170  values (35, 'Oysho ParkLake', '031446673', 'oysho_parklake@gmail.com', 'Liviu Rebreanu 5', 25, 27);
171
```

Script Output | Query Result

SQL | All Rows Fetched: 5 in 0.009 seconds

	ID_MAGAZIN	NUME_MAGAZIN	TELEFON	EMAIL	ADRESA	ID_OYSHO	ID_MAN
1	31	Oysho Promenada	031455678	oysho_prome@gmail.com	Barbu Vacarescu 8	21	
2	32	Oysho SunPLaza	0314567890	oysho_sunplaza@gmail.com	Vacaresti 32	22	
3	33	Oysho Cotroceni	031400500	oysho_afi@gmail.com	Cotroceni 35	23	
4	34	Oyhso Baneasa	031444556	oysho_baneasa@gmail.com	Bucuresti-Ploiesti 14	24	
5	35	Oysho ParkLake	031446673	oysho_parklake@gmail.com	Liviu Rebreanu 5	25	

insert into contract values (41, TO_DATE('15-02-2010','dd-mm-yyyy'), 'manager', 21, 27);

insert into contract values (42, TO_DATE('6-04-2013','dd-mm-yyyy'), 'manager', 22, 28);

insert into contract values (43, TO_DATE('23-11-2015','dd-mm-yyyy'), 'manager', 23, 29);

insert into contract values (44, TO_DATE('25-12-2012', 'dd-mm-yyyy'), 'manager', 24, 30);

insert into contract values (45, TO_DATE('17-05-2017','dd-mm-yyyy'), 'manager', 25, 26);

insert into contract values (46, TO_DATE('24-11-2021','dd-mm-yyyy'), 'angajat', 22, 39);

insert into contract values (47, TO_DATE('31-01-2020','dd-mm-yyyy'), 'angajat', 25, 40);

insert into contract values (48, TO_DATE('16-10-2021','dd-mm-yyyy'), 'angajat', 24, 36);

insert into contract values (49, TO_DATE('25-09-2021','dd-mm-yyyy'), 'angajat', 21, 37);

insert into contract values (50, TO_DATE('19-07-2022','dd-mm-yyyy'), 'angajat', 23, 38);

```
201 insert into contract
202 values (41, TO_DATE('15-02-2010','dd-mm-yyyy'), 'manager', 21, 27);
203
204 insert into contract
205 values (42, TO_DATE('6-04-2013','dd-mm-yyyy'), 'manager', 22, 28);
206
207 insert into contract
208 values (43, TO_DATE('23-11-2015','dd-mm-yyyy'), 'manager', 23, 29);
209
210 insert into contract
211 values (44, TO_DATE('25-12-2012', 'dd-mm-yyyy'), 'manager', 24, 30);
212
213 insert into contract
214 values (45, TO_DATE('17-05-2017','dd-mm-yyyy'), 'manager', 25, 26);
215
216 insert into contract
217 values (46, TO_DATE('24-11-2021','dd-mm-yyyy'), 'angajat', 22, 39);
218
219 insert into contract
220 values (47, TO_DATE('31-01-2020','dd-mm-yyyy'), 'angajat', 25, 40);
221
222 insert into contract
223 values (48, TO_DATE('16-10-2021','dd-mm-yyyy'), 'angajat', 24, 36);
224
225 insert into contract
226 values (49, TO_DATE('25-09-2021','dd-mm-yyyy'), 'angajat', 21, 37);
227
228 insert into contract
229 values (50, TO_DATE('19-07-2022','dd-mm-yyyy'), 'angajat', 23, 38);
```

Script Output | Query Result

SQL | All Rows Fetched: 10 in 0.015 seconds

	ID_CONTRACT	DATA_SEMNARII	TIP_CONTRACT	ID_OYSHO	ID_ANGAJAT
1	41	15-FEB-10	manager	21	27
2	42	06-APR-13	manager	22	28
3	43	23-NOV-15	manager	23	29
4	44	25-DEC-12	manager	24	30
5	45	17-MAY-17	manager	25	26
6	46	24-NOV-21	angajat	22	39
7	47	31-JAN-20	angajat	25	40
8	48	16-OCT-21	angajat	24	36
9	49	25-SEP-21	angajat	21	37
10	50	19-JUL-22	angajat	23	38

insert into contor_marfa values (51, 156, 6, 34);

insert into contor_marfa values (52, 144, 8, 33);

```
insert into contor_marfa values (53, 200, 9, 35);
insert into contor_marfa values (54, 45, 10, 31);
insert into contor_marfa values (55, 57, 8, 32);
insert into contor_marfa values (56, 230, 7, 35);
insert into contor_marfa values (57, 400, 6, 33);
insert into contor_marfa values (58, 245, 9, 32);
insert into contor_marfa values (59, 120, 7, 35);
insert into contor_marfa values (60, 89, 9, 34);
```

```
244
245 insert into contor_marfa
246 values (51, 156, 6, 34);
247
248 insert into contor_marfa
249 values (52, 144, 8, 33);
250
251 insert into contor_marfa
252 values (53, 200, 9, 35);
253
254 insert into contor_marfa
255 values (54, 45, 10, 31);
256
257 insert into contor_marfa
258 values (55, 57, 8, 32);
259
260 insert into contor_marfa
261 values (56, 230, 7, 35);
262
263 insert into contor_marfa
264 values (57, 400, 6, 33);
265
266 insert into contor_marfa
267 values (58, 245, 9, 32);
268
269 insert into contor_marfa
270 values (59, 120, 7, 35);
271
```

Script Output | Query Result

SQL | All Rows Fetched: 10 in 0.011 seconds

	ID_CONTOR	NR_CUTII	ID_MARFA	ID_MAGAZIN
1	51	156	6	34
2	52	144	8	33
3	53	200	9	35
4	54	45	10	31
5	55	57	8	32
6	56	230	7	35
7	57	400	6	33
8	58	245	9	32
9	59	120	7	35
10	60	89	9	34

insert into client values (61, 'Pirinei', 'Ionut', 'ionut@gmail.com', '0756789900');

insert into client values (62, 'Predeanu', 'Mariana', 'mary12@gmail.com', '0745677899');

insert into client values (63, 'Ciocos', 'Bianca', 'bye_eu@gmail.com', '0765444143');

insert into client values (64, 'Teodoroiu', 'Cristina', 'cris_teo@gmail.com', '0746767888');

insert into client values (65, 'Mircea', 'Carina', 'cary_cary@gmail.com', '0745883464');

```
86  insert into client
87  values (61, 'Pirinei', 'Ionut', 'ionut@gmail.com', '0756789900');
88
89  insert into client
90  values (62, 'Predeanu', 'Mariana', 'mary12@gmail.com', '0745677899');
91
92  insert into client
93  values (63, 'Ciocos', 'Bianca', 'bye_eu@gmail.com', '0765444143');
94
95  insert into client
96  values (64, 'Teodoroiu', 'Cristina', 'cris_teo@gmail.com', '0746767888');
97
98  insert into client
99  values (65, 'Mircea', 'Carina', 'cary_cary@gmail.com', '0745883464');
00
01  commit;
02  select* from client;
```

Script Output | Query Result

SQL | All Rows Fetched: 5 in 0.38 seconds

	ID_CLIENT	NUME_CLIENT	PRENUME_CLIENT	EMAIL_CLIENT	TELEFON_CLIENT
1	61	Pirinei	Ionut	ionut@gmail.com	0756789900
2	62	Predeanu	Mariana	mary12@gmail.com	0745677899
3	63	Ciocos	Bianca	bye_eu@gmail.com	0765444143
4	64	Teodoroiu	Cristina	cris_teo@gmail.com	0746767888
5	65	Mircea	Carina	cary_cary@gmail.com	0745883464

insert into comenzi_online values (66, TO_DATE('16-01-2023','dd-mm-yyyy'), TO_DATE('24-02-2023','dd-mm-yyyy'), 'Barbu Vacarescu 70', 31, 64);

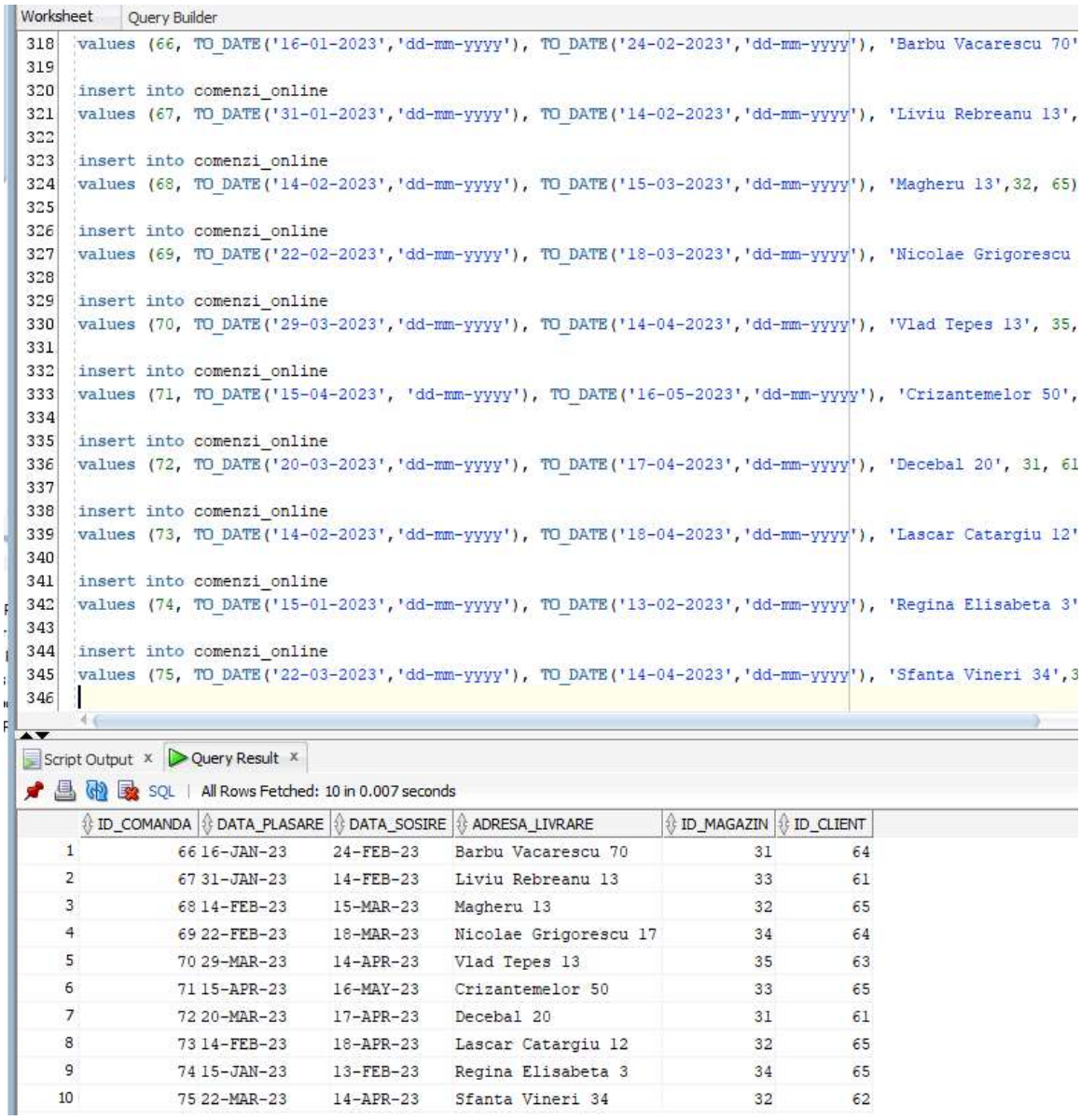
insert into comenzi_online values (67, TO_DATE('31-01-2023','dd-mm-yyyy'), TO_DATE('14-02-2023','dd-mm-yyyy'), 'Liviu Rebreanu 13',33,61);

insert into comenzi_online values (68, TO_DATE('14-02-2023','dd-mm-yyyy'), TO_DATE('15-03-2023','dd-mm-yyyy'), 'Magheru 13',32, 65);

insert into comenzi_online values (69, TO_DATE('22-02-2023','dd-mm-yyyy'), TO_DATE('18-03-2023','dd-mm-yyyy'), 'Nicolae Grigorescu 17', 34, 64);

insert into comenzi_online values (70, TO_DATE('29-03-2023','dd-mm-yyyy'), TO_DATE('14-04-2023','dd-

```
mm-yyyy'), 'Vlad Tepes 13', 35, 63);

insert into comenzi_online values (71, TO_DATE('15-04-2023', 'dd-mm-yyyy'), TO_DATE('16-05-2023','dd-mm-yyyy'), 'Crizantemelor 50', 33, 65);

insert into comenzi_online values (72, TO_DATE('20-03-2023','dd-mm-yyyy'), TO_DATE('17-04-2023','dd-mm-yyyy'), 'Decebal 20', 31, 61);

insert into comenzi_online values (73, TO_DATE('14-02-2023','dd-mm-yyyy'), TO_DATE('18-04-2023','dd-mm-yyyy'), 'Lascar Catargiu 12',32, 65);

insert into comenzi_online values (74, TO_DATE('15-01-2023','dd-mm-yyyy'), TO_DATE('13-02-2023','dd-mm-yyyy'), 'Regina Elisabeta 3',34,65);

insert into comenzi_online values (75, TO_DATE('22-03-2023','dd-mm-yyyy'), TO_DATE('14-04-2023','dd-mm-yyyy'), 'Sfanta Vineri 34',32,62);
```



```
Worksheet | Query Builder
318  values (66, TO_DATE('16-01-2023','dd-mm-yyyy'), TO_DATE('24-02-2023','dd-mm-yyyy'), 'Barbu Vacarescu 70'
319
320  insert into comenzi_online
321  values (67, TO_DATE('31-01-2023','dd-mm-yyyy'), TO_DATE('14-02-2023','dd-mm-yyyy'), 'Liviu Rebreanu 13',
322
323  insert into comenzi_online
324  values (68, TO_DATE('14-02-2023','dd-mm-yyyy'), TO_DATE('15-03-2023','dd-mm-yyyy'), 'Magheru 13',32, 65)
325
326  insert into comenzi_online
327  values (69, TO_DATE('22-02-2023','dd-mm-yyyy'), TO_DATE('18-03-2023','dd-mm-yyyy'), 'Nicolae Grigorescu
328
329  insert into comenzi_online
330  values (70, TO_DATE('29-03-2023','dd-mm-yyyy'), TO_DATE('14-04-2023','dd-mm-yyyy'), 'Vlad Tepes 13', 35,
331
332  insert into comenzi_online
333  values (71, TO_DATE('15-04-2023', 'dd-mm-yyyy'), TO_DATE('16-05-2023','dd-mm-yyyy'), 'Crizantemelor 50',
334
335  insert into comenzi_online
336  values (72, TO_DATE('20-03-2023','dd-mm-yyyy'), TO_DATE('17-04-2023','dd-mm-yyyy'), 'Decebal 20', 31, 61
337
338  insert into comenzi_online
339  values (73, TO_DATE('14-02-2023','dd-mm-yyyy'), TO_DATE('18-04-2023','dd-mm-yyyy'), 'Lascar Catargiu 12'
340
341  insert into comenzi_online
342  values (74, TO_DATE('15-01-2023','dd-mm-yyyy'), TO_DATE('13-02-2023','dd-mm-yyyy'), 'Regina Elisabeta 3'
343
344  insert into comenzi_online
345  values (75, TO_DATE('22-03-2023','dd-mm-yyyy'), TO_DATE('14-04-2023','dd-mm-yyyy'), 'Sfanta Vineri 34',3
346
```

Script Output | Query Result

SQL | All Rows Fetched: 10 in 0.007 seconds

	ID_COMANDA	DATA_PLASARE	DATA_SOSIRE	ADRESA_LIVRARE	ID_MAGAZIN	ID_CLIENT
1	66	16-JAN-23	24-FEB-23	Barbu Vacarescu 70	31	64
2	67	31-JAN-23	14-FEB-23	Liviu Rebreanu 13	33	61
3	68	14-FEB-23	15-MAR-23	Magheru 13	32	65
4	69	22-FEB-23	18-MAR-23	Nicolae Grigorescu 17	34	64
5	70	29-MAR-23	14-APR-23	Vlad Tepes 13	35	63
6	71	15-APR-23	16-MAY-23	Crizantemelor 50	33	65
7	72	20-MAR-23	17-APR-23	Decebal 20	31	61
8	73	14-FEB-23	18-APR-23	Lascar Catargiu 12	32	65
9	74	15-JAN-23	13-FEB-23	Regina Elisabeta 3	34	65
10	75	22-MAR-23	14-APR-23	Sfanta Vineri 34	32	62

```
insert into rating values (76, 8, 26, 65);

insert into rating values (77, 10, 27, 61);

insert into rating values (78, 5, 37, 64);

insert into rating values (79, 7, 30, 61);

insert into rating values (80, 9, 38, 65);
```

```
59  insert into rating
60  values (76, 8, 26, 65);
61
62  insert into rating
63  values (77, 10, 27, 61);
64
65  insert into rating
66  values (78, 5, 37, 64);
67
68  insert into rating
69  values (79, 7, 30, 61);
70
71  insert into rating
72  values (80, 9, 38, 65);
73
```

Script Output x | Query Result x

SQL | All Rows Fetched: 5 in 0.019 seconds

	ID_RATING	NOTA_ACORDATA	ID_ANGAJAT	ID_CLIENT
1	76	8	26	65
2	77	10	27	61
3	78	5	37	64
4	79	7	30	61
5	80	9	38	65

```
insert into review values (81, 'angajati foarte prietenosi', 33, 64);

insert into review values (82, 'haine calitative', 31, 65);

insert into review values (83, 'personal priceput', 32, 63);

insert into review values (84, 'ador acest brand', 34, 61);

insert into review values(85, 'mai revin aici',35, 62);
```

```
386  insert into review
387  values (81, 'angajati foarte prietenosi', 33, 64);
388
389  insert into review
390  values (82, 'haine calitative', 31, 65);
391
392  insert into review
393  values (83, 'personal priceput', 32, 63);
394
395  insert into review
396  values (84, 'ador acest brand', 34, 61);
397
398  insert into review
399  values(85, 'mai revin aici',35, 62);
400
401  commit;
```

Script Output | Query Result

SQL | All Rows Fetched: 5 in 0.019 seconds

	ID_REVIEW	DESCRIERE	ID_MAGAZIN	ID_CLIENT
1	81	angajati foarte prietenosi	33	64
2	82	haine calitative	31	65
3	83	personal priceput	32	63
4	84	ador acest brand	34	61
5	85	mai revin aici	35	62

insert into reducere values (86, 10, 3, TO_DATE('01-01-2023','dd-mm-yyyy'), 61);

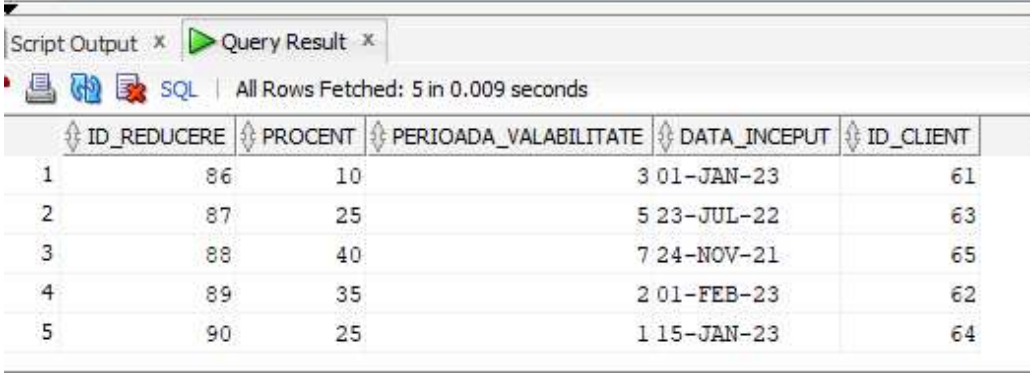
insert into reducere values (87, 25, 5, TO_DATE('23-07-2022','dd-mm-yyyy'), 63);

insert into reducere values (88, 40, 7, TO_DATE('24-11-2021','dd-mm-yyyy'), 65);

insert into reducere values (89, 35, 2, TO_DATE('01-02-2023','dd-mm-yyyy'), 62);

insert into reducere values (90, 25, 1, TO_DATE('15-01-2023','dd-mm-yyyy'), 64);

```
insert into reducere
values (86, 10, 3, TO_DATE('01-01-2023','dd-mm-yyyy'), 61);

insert into reducere
values (87, 25, 5, TO_DATE('23-07-2022','dd-mm-yyyy'), 63);

insert into reducere
values (88, 40, 7, TO_DATE('24-11-2021','dd-mm-yyyy'), 65);

insert into reducere
values (89, 35, 2, TO_DATE('01-02-2023','dd-mm-yyyy'), 62);

insert into reducere
values (90, 25, 1, TO_DATE('15-01-2023','dd-mm-yyyy'), 64);

commit;
select* from reducere;
```



Script Output | Query Result | SQL | All Rows Fetched: 5 in 0.009 seconds

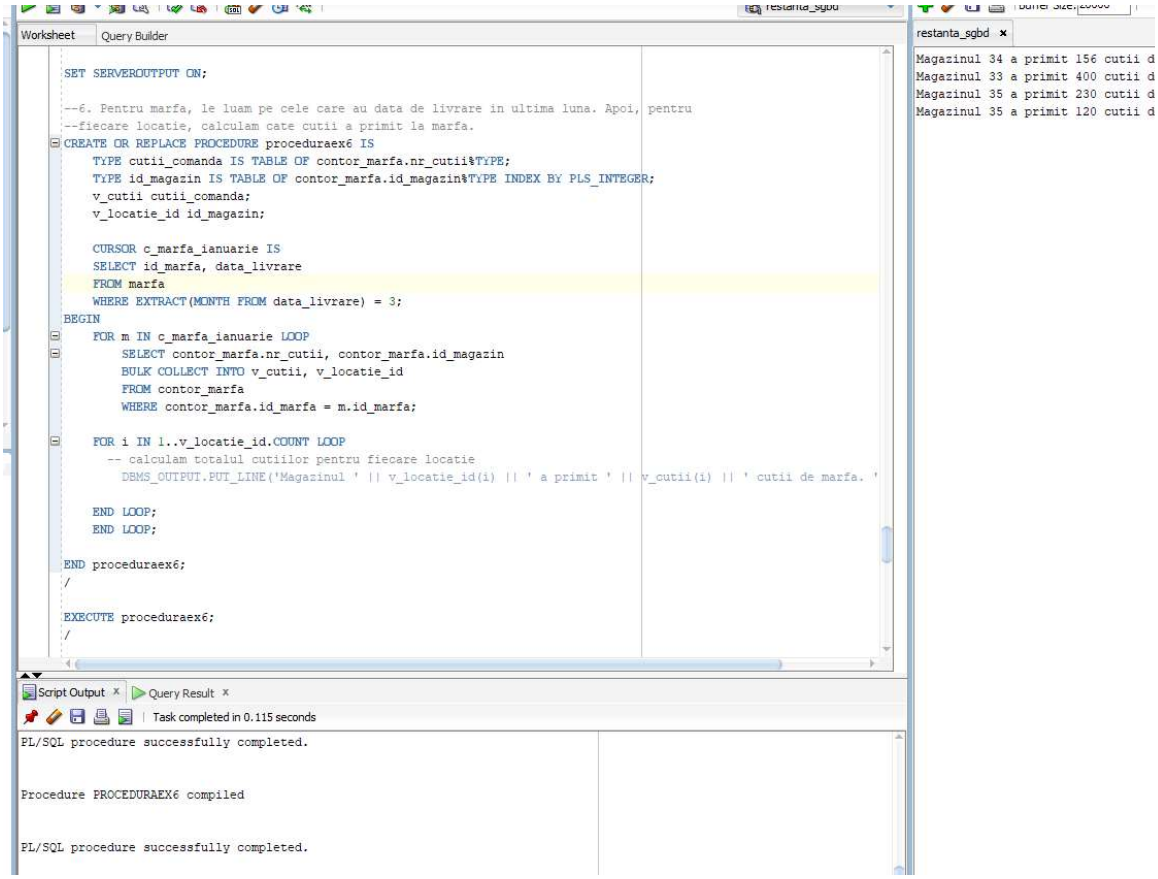
	ID_REDUCERE	PROCENT	PERIOADA_VALABILITATE	DATA_INCEPUT	ID_CLIENT
1	86	10	3	01-JAN-23	61
2	87	25	5	23-JUL-22	63
3	88	40	7	24-NOV-21	65
4	89	35	2	01-FEB-23	62
5	90	25	1	15-JAN-23	64

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.

--6. Pentru marfa, le luam pe cele care au data de livrare in ultima luna. Apoi, pentru fiecare locatie, calculam cate --cutii a primit la marfa.

```
CREATE OR REPLACE PROCEDURE proceduraex6 IS

   TYPE cutii_comanda IS TABLE OF contor_marfa.nr_cutii%TYPE;

   TYPE id_magazin IS TABLE OF contor_marfa.id_magazin%TYPE INDEX BY PLS_INTEGER;

   v_cutii cutii_comanda;

   v_locatie_id id_magazin;

   CURSOR c_marfa_ianuarie IS

   SELECT id_marfa, data_livrare
```

```
   FROM marfa
   WHERE EXTRACT(MONTH FROM data_livrare) = 3;
BEGIN
   FOR m IN c_marfa_ianuarie LOOP
      SELECT contor_marfa.nr_cutii, contor_marfa.id_magazin
      BULK COLLECT INTO v_cutii, v_locatie_id
      FROM contor_marfa
      WHERE contor_marfa.id_marfa = m.id_marfa;
   FOR i IN 1..v_locatie_id.COUNT LOOP
     -- calculam totalul cutiilor pentru fiecare locatie
      DBMS_OUTPUT.PUT_LINE('Magazinul ' || v_locatie_id(i) || ' a primit ' || v_cutii(i) || ' cutii de marfa.
');
   END LOOP;
   END LOOP;
END proceduraex6;/
EXECUTE proceduraex6;/
```



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.

--7. Afisam pentru fiecare angajat, media ratingurilor primite. (2 cursoare)

SET SERVEROUTPUT ON;

CREATE OR REPLACE PROCEDURE proceduraex7 IS

-- Cursor parametrizat pentru a itera prin fiecare angajat

CURSOR c_angajati IS

SELECT id_angajat, nume_angajat, prenume_angajat

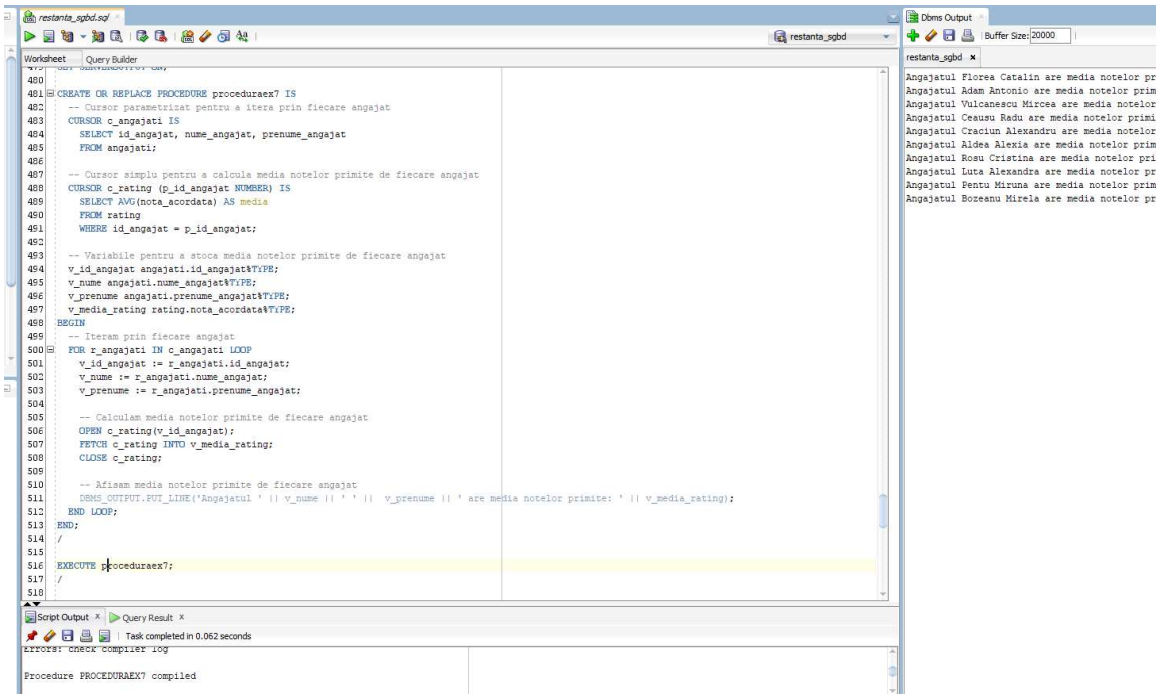
FROM angajati;

-- Cursor simplu pentru a calcula media notelor primite de fiecare angajat

CURSOR c_rating (p_id_angajat NUMBER) IS

SELECT AVG(nota_acordata) AS media

```
   FROM rating
   WHERE id_angajat = p_id_angajat;
  -- Variabile pentru a stoca media notelor primite de fiecare angajat
  v_id_angajat angajati.id_angajat%TYPE;
  v_nume angajati.nume_angajat%TYPE;
  v_prenume angajati.prenume_angajat%TYPE;
  v_media_rating rating.nota_acordata%TYPE;
BEGIN
  -- Iteram prin fiecare angajat
  FOR r_angajati IN c_angajati LOOP
   v_id_angajat := r_angajati.id_angajat;
   v_nume := r_angajati.nume_angajat;
   v_prenume := r_angajati.prenume_angajat;
   -- Calculam media notelor primite de fiecare angajat
   OPEN c_rating(v_id_angajat);
   FETCH c_rating INTO v_media_rating;
   CLOSE c_rating;
   -- Afisam media notelor primite de fiecare angajat
   DBMS_OUTPUT.PUT_LINE('Angajatul ' || v_nume || ' ' ||  v_prenume || ' are media notelor primite: '
|| v_media_rating);
  END LOOP;
END;/
EXECUTE proceduraex7;/
```



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.

--8. Toate comenzile online care se incadreaza in perioada de valabilitate a reducerii (data_plasare > data_inceput reducere).

--Exceptii: pt un client nu gaseste nicio comanda plasata sau nicio reducere valabila.

```
CREATE OR REPLACE FUNCTION functieex8(
   p_id_client IN client.id_client%TYPE
) RETURN comenzi_online.id_comanda%TYPE
IS
   v_data_sfarsit DATE;
   v_rezultat NUMBER;
   exceptie1 EXCEPTION;
   PRAGMA EXCEPTION_INIT(exceptie1,-20001);
   exceptie2 EXCEPTION;
   PRAGMA EXCEPTION_INIT(exceptie2,-20002);
   exceptie3 EXCEPTION;
```

```
    PRAGMA EXCEPTION_INIT(exceptie3,-20003);
BEGIN
    -- Check if the client ID exists in the CLIENT table
    SELECT COUNT(*)
    INTO v_rezultat
    FROM CLIENT
    WHERE id_client = p_id_client;
    IF v_rezultat = 0 THEN
        -- raise exception when no record is found for given client ID
        RAISE exceptie3;
    ELSIF v_rezultat >1 THEN
        -- raise exception when more than one record is found for given client ID
        RAISE exceptie2;
    END IF;
    -- calculate the end date of the discount period
    SELECT ADD_MONTHS(data_inceput, perioada_valabilitate * 12) INTO v_data_sfarsit
    FROM reducere
    WHERE id_client = p_id_client;
    -- if no discount record is found for the given client ID, raise an exception
    IF v_data_sfarsit IS NULL THEN
        RAISE exceptie1;
    END IF;
    -- Extract the online orders of the client that fall within the discount period
    SELECT COUNT(co.id_comanda)
    INTO v_rezultat
    FROM client c
    LEFT JOIN reducere r ON c.id_client = r.id_client
    LEFT JOIN comenzi_online co ON c.id_client = co.id_client
    WHERE c.id_client = p_id_client AND co.data_plasare BETWEEN r.data_inceput AND v_data_sfarsit;
```

```
    IF v_rezultat = 0 THEN
        -- If no online orders are found for the given client, raise an exception
        RAISE exceptie1;
    END IF;
    RETURN v_rezultat;
EXCEPTION
    WHEN exceptie1 THEN
        DBMS_OUTPUT.PUT_LINE('Nu exista nicio comanda plasata pentru clientul dat');
        RETURN 0;
    WHEN exceptie2 THEN
        DBMS_OUTPUT.PUT_LINE('Exista mai multi clienti cu acelasi id in baza de date');
        RETURN 0;
    WHEN exceptie3 THEN
        DBMS_OUTPUT.PUT_LINE('Clientul dat nu exista in baza de date');
        RETURN 0;
    -- Other exceptions
    WHEN OTHERS THEN
        DBMS_OUTPUT.PUT_LINE('A aparut o eroare: ' || SQLERRM);
        RETURN 0;
END functieex8;/
select* from client;
select functieex8(61) from dual;
select functieex8(1) from dual;
select functieex8("40") from dual;
```

```
    INTO v_rezultat
    FROM client c
    LEFT JOIN reducere r ON c.id_client = r.id_client
    LEFT JOIN comenzi_online co ON c.id_client = co.id_client
    WHERE c.id_client = p_id_client AND co.data_plasare BETWEEN r.data_inceput AND v_data_sfarsit;

    IF v_rezultat = 0 THEN
        -- If no online orders are found for the given client, raise an exception
        RAISE exceptiel;
    END IF;

    RETURN v_rezultat;

EXCEPTION
    WHEN exceptiel THEN
        DBMS_OUTPUT.PUT_LINE('Nu exista nicio comanda plasata pentru clientul dat');
        RETURN 0;
    WHEN exceptie2 THEN
        DBMS_OUTPUT.PUT_LINE('Exista mai multi clienti cu acelasi id in baza de date');
        RETURN 0;
    WHEN exceptie3 THEN
        DBMS_OUTPUT.PUT_LINE('Clientul dat nu exista in baza de date');
        RETURN 0;
    -- Other exceptions
    WHEN OTHERS THEN
        DBMS_OUTPUT.PUT_LINE('A aparut o eroare: ' || SQLERRM);
        RETURN 0;
END functieex8;
/
```

Script Output | Query Result

Task completed in 0.076 seconds

```
unction FUNCTIEEX8 compiled
```

```
select functieex8(61) from dual;
select functieex8(1) from dual;
select functieex8(63) from dual;
select functieex8('40') from dual;
```

Script Output | Query Result

SQL | All Rows Fetched: 1 in 0.003 secon

	FUNCTIEEX8(61)
1	2

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.

--9. Fie dat numele unui angajat. Sa se afiseze toate contractele pe care le are, avg rating si oysho ul la care lucreaza (tara oras + nume magazin). Vom folosi tabelele locatie, oysho, contract,angajati. Exceptii: sa nu existe numele angajatului dat, sa nu aiba rating, mai multi angajati cu acelasi nume

```
CREATE OR REPLACE PROCEDURE proceduraex9(p_nume_angajat angajati.nume_angajat%TYPE)
IS
   v_id_contract CONTRACT.id_contract%TYPE;
   v_tara OYSHO.tara%TYPE;
   v_oras OYSHO.oras%TYPE;
   v_nota RATING.nota_acordata%TYPE;
   v_nume_magazin LOCATIE.nume_magazin%TYPE;
   v_rezultat NUMBER;
   v_id NUMBER;
   v_rez NUMBER;
   exceptie1 EXCEPTION;
   PRAGMA EXCEPTION_INIT(exceptie1,-20001);
BEGIN
   SELECT id_angajat
   INTO v_id
   FROM ANGAJATI
   WHERE p_nume_angajat = nume_angajat;
   SELECT COUNT(*)
   INTO v_rezultat
   FROM ANGAJATI
   WHERE id_angajat = v_id;
   SELECT COUNT(*)
```

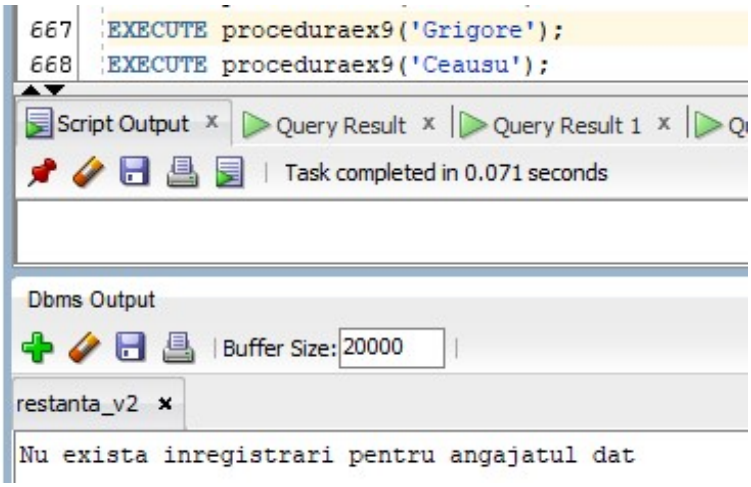
```
   INTO v_rez
   FROM RATING
   WHERE id_angajat = v_id;
   IF v_rezultat = 0 THEN
      RAISE NO_DATA_FOUND;
   ELSIF v_rezultat >1 THEN
      RAISE TOO_MANY_ROWS;
   ELSIF v_rez = 0 THEN
      RAISE exceptie1;
   END IF;
   SELECT a.id_angajat , c.id_contract , r.nota_acordata , o.tara , o.oras , l.nume_magazin
   INTO v_id, v_id_contract, v_nota, v_tara, v_oras, v_nume_magazin
   FROM ANGAJATI a
   LEFT JOIN RATING r ON a.id_angajat = r.id_angajat
   LEFT JOIN CONTRACT c ON c.id_angajat = a.id_angajat
   RIGHT JOIN OYSHO o ON o.id_oysho = c.id_oysho
   LEFT JOIN LOCATIE l ON o.id_oysho = l.id_oysho
   WHERE a.nume_angajat = p_nume_angajat;
   DBMS_OUTPUT.PUT_LINE('Angajatul cu numele ' || p_nume_angajat || ' are contractul ' ||
v_id_contract || ', rating-ul ' || v_nota || ' si lucreaza in magazinul ' ||  v_nume_magazin || ', din tara ' ||
v_tara || ', orasul ' || v_oras);
EXCEPTION
  WHEN NO_DATA_FOUND THEN
   DBMS_OUTPUT.PUT_LINE( 'Nu exista inregistrari pentru angajatul dat');
  WHEN TOO_MANY_ROWS THEN
   DBMS_OUTPUT.PUT_LINE('Exista mai multi angajati cu acelasi nume');
  WHEN exceptie1 THEN
   DBMS_OUTPUT.PUT_LINE('Angajatul dat nu a primit niciun rating');
END proceduraex9;/
EXECUTE proceduraex9('Florea');
```

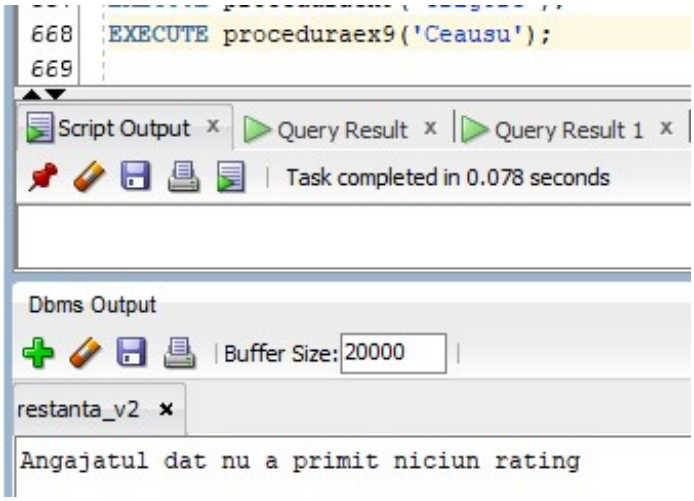
EXECUTE proceduraex9('Grigore');

EXECUTE proceduraex9('Ceausu');

```
Worksheet | Query Builder
    FROM ANGAJATI
    WHERE id_angajat = v_id;

    SELECT COUNT(*)
    INTO v_rez
    FROM RATING
    WHERE id_angajat = v_id;

    IF v_rezultat = 0 THEN
        RAISE NO_DATA_FOUND;
    ELSIF v_rezultat >1 THEN
        RAISE TOO_MANY_ROWS;
    ELSIF v_rez = 0 THEN
        RAISE exceptiel;
    END IF;

    SELECT a.id_angajat , c.id_contract , r.nota_acordata , o.tara , o.oras , l.nume_magazin
    INTO v_id, v_id_contract, v_nota, v_tara, v_oras, v_nume_magazin
    FROM ANGAJATI a
    LEFT JOIN RATING r ON a.id_angajat = r.id_angajat
    LEFT JOIN CONTRACT c ON c.id_angajat = a.id_angajat
    RIGHT JOIN OYSHO o ON o.id_oysho = c.id_oysho
    LEFT JOIN LOCATIE l ON o.id_oysho = l.id_oysho
    WHERE a.nume_angajat = p_nume_angajat;

    DBMS_OUTPUT.PUT_LINE('Angajatul cu numele ' || p_nume_angajat || ' are contractul ' || v_id_contract || ', rating-ul ' || v_nota
EXCEPTION

  WHEN NO_DATA_FOUND THEN
    DBMS_OUTPUT.PUT_LINE( 'Nu exista inregistrari pentru angajatul dat');
  WHEN TOO_MANY_ROWS THEN
    DBMS_OUTPUT.PUT_LINE('Exista mai multi angajati cu acelasi nume');
  WHEN exceptiel THEN
    DBMS_OUTPUT.PUT_LINE('Angajatul dat nu a primit niciun rating');

END proceduraex9;
/
Script Output | Query Result | Query Result 1 | Query Result 2
Task completed in 0.054 seconds
Procedure PROCEDURAEX9 compiled
```

```
EXECUTE proceduraex9('Florea');
EXECUTE proceduraex9('Grigore');
EXECUTE proceduraex9('Ceausu');
Script Output | Query Result | Query Result 1 | Query Result 2
Task completed in 0.067 seconds
Dbms Output
Buffer Size: 20000
restanta_v2
Angajatul cu numele Florea are contractul 45, rating-ul 8 si lucreaza in magazinul Oysho ParkLake, din tara Portugalia, orasul Lisab
```





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

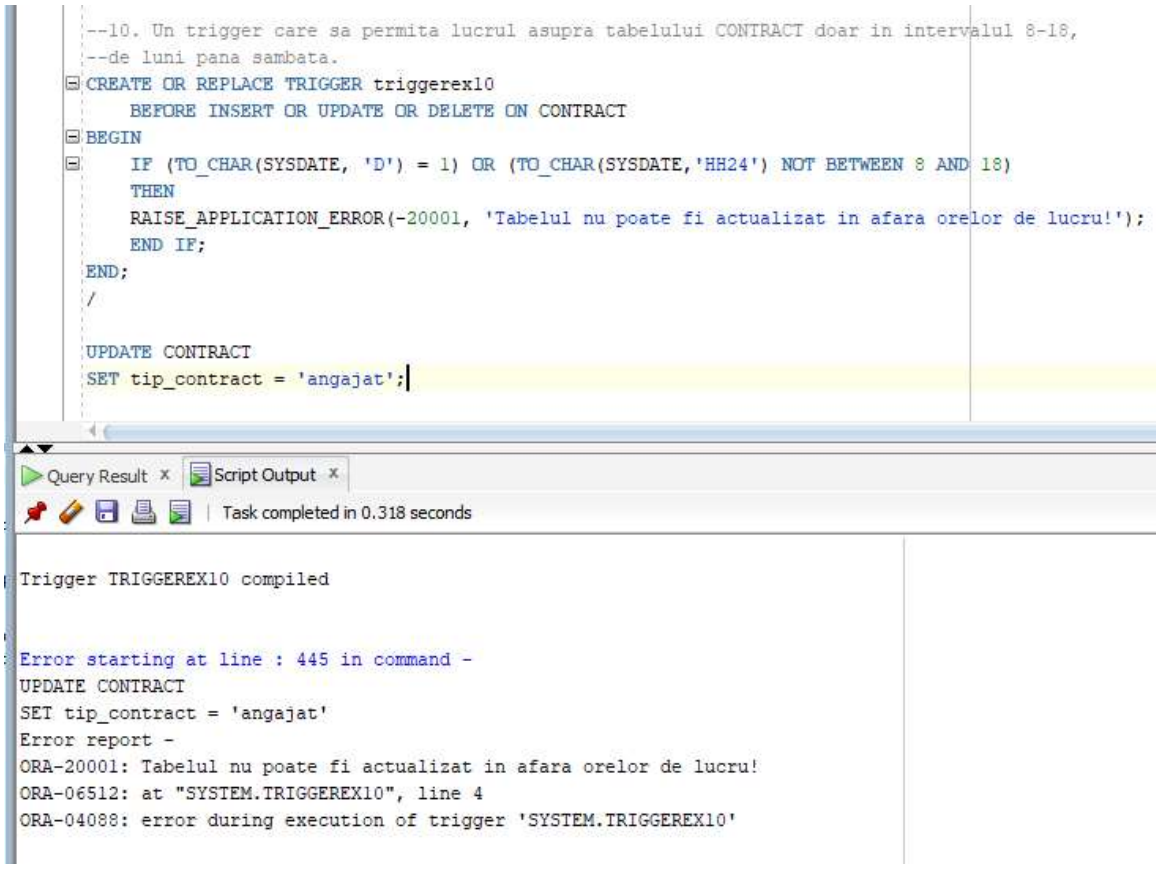
--10. Un trigger care sa permita lucrul asupra tabelului CONTRACT doar in intervalul 8-18,

--de luni pana sambata.

CREATE OR REPLACE TRIGGER triggerex10

BEFORE INSERT OR UPDATE OR DELETE ON CONTRACT

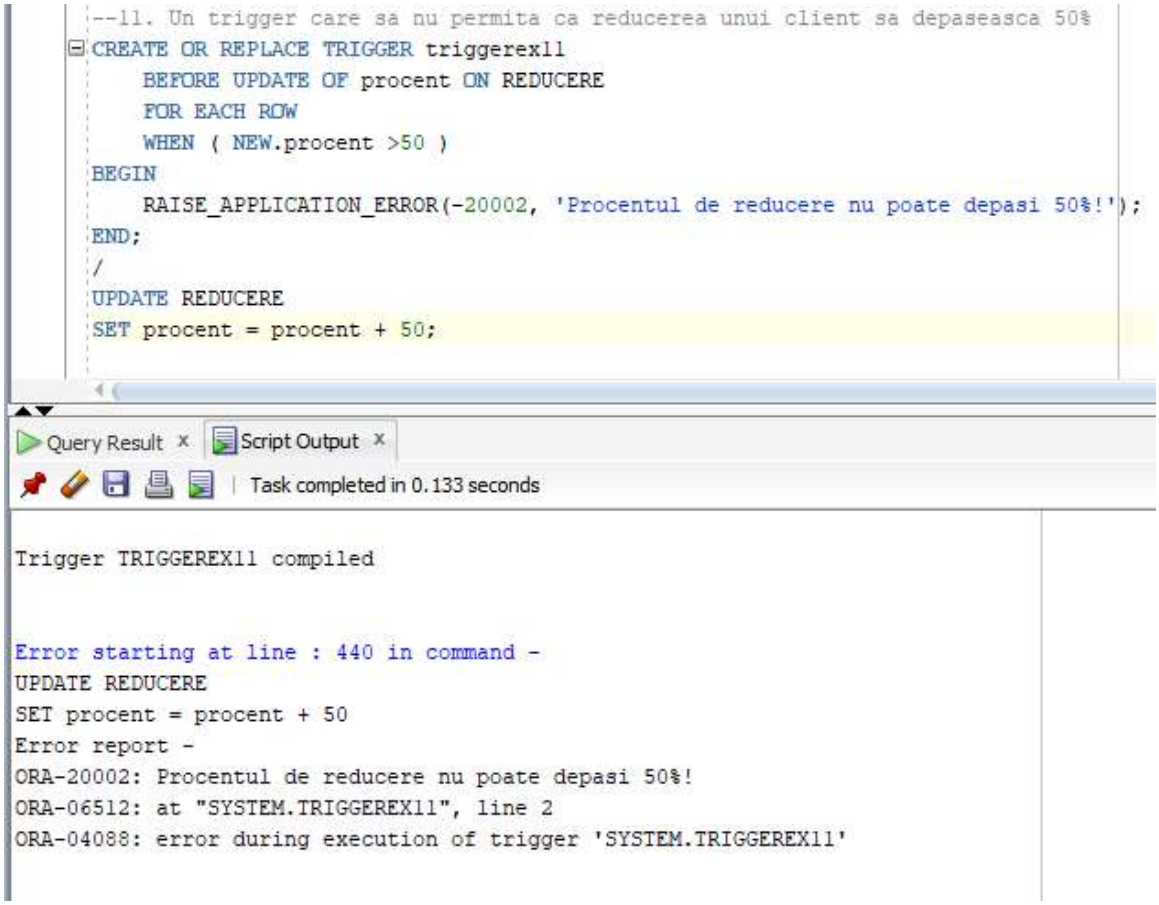
```
BEGIN
   IF (TO_CHAR(SYSDATE, 'D') = 1) OR (TO_CHAR(SYSDATE,'HH24') NOT BETWEEN 8 AND 18)
   THEN
   RAISE_APPLICATION_ERROR(-20001, 'Tabelul nu poate fi actualizat in afara orelor de lucru!');
   END IF;
END;/
UPDATE CONTRACT
SET tip_contract = 'angajat';
```



11. Definiți un trigger de tip LMD la nivel de linie. Declanșați trigger-ul.

```
--11. Un trigger care sa nu permita ca reducerea unui client sa depaseasca 50%
CREATE OR REPLACE TRIGGER triggerex11
   BEFORE UPDATE OF procent ON REDUCERE
   FOR EACH ROW
```

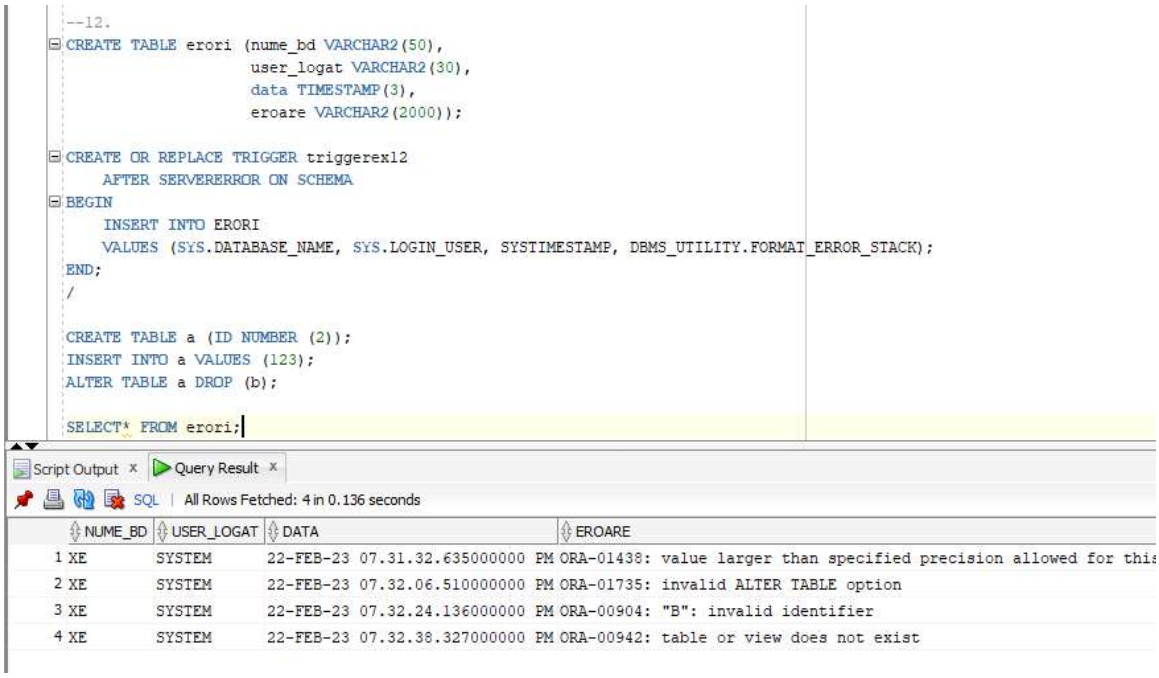
```
   WHEN ( NEW.procent >50 )
BEGIN
   RAISE_APPLICATION_ERROR(-20002, 'Procentul de reducere nu poate depasi 50%!');
END;
/
UPDATE REDUCERE
SET procent = procent + 50;
```



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

```
CREATE TABLE erori (nume_bd VARCHAR2(50),
                    user_logat VARCHAR2(30),
                    data TIMESTAMP(3),
                    eroare VARCHAR2(2000));
```

```
CREATE OR REPLACE TRIGGER triggerex12

   AFTER SERVERERROR ON SCHEMA

BEGIN

   INSERT INTO ERORI

   VALUES (SYS.DATABASE_NAME, SYS.LOGIN_USER, SYSTIMESTAMP,
DBMS_UTILITY.FORMAT_ERROR_STACK);

END;

/


CREATE TABLE a (ID NUMBER (2));

INSERT INTO a VALUES (123);

ALTER TABLE a DROP (b);

SELECT* FROM erori;
```



```
--12.
CREATE TABLE erori (nume_bd VARCHAR2(50),
                    user_logat VARCHAR2(30),
                    data TIMESTAMP(3),
                    eroare VARCHAR2(2000));

CREATE OR REPLACE TRIGGER triggerex12
    AFTER SERVERERROR ON SCHEMA
BEGIN
    INSERT INTO ERORI
    VALUES (SYS.DATABASE_NAME, SYS.LOGIN_USER, SYSTIMESTAMP, DBMS_UTILITY.FORMAT_ERROR_STACK);
END;
/

CREATE TABLE a (ID NUMBER (2));
INSERT INTO a VALUES (123);
ALTER TABLE a DROP (b);

SELECT* FROM erori;
```

Script Output | Query Result

SQL | All Rows Fetched: 4 in 0.136 seconds

	NUME_BD	USER_LOGAT	DATA	EROARE
1	XE	SYSTEM	22-FEB-23 07.31.32.635000000 PM	ORA-01438: value larger than specified precision allowed for this
2	XE	SYSTEM	22-FEB-23 07.32.06.510000000 PM	ORA-01735: invalid ALTER TABLE option
3	XE	SYSTEM	22-FEB-23 07.32.24.136000000 PM	ORA-00904: "B": invalid identifier
4	XE	SYSTEM	22-FEB-23 07.32.38.327000000 PM	ORA-00942: table or view does not exist