# Crearea bazei de date in ORACLE

# CREATE TABLE artisti (

# id\_artist NUMBER(2) NOT NULL,

# nume\_de\_scena VARCHAR2(30) NOT NULL,

# gen\_muzical VARCHAR2(20),

# piesa\_start VARCHAR2(30)

# );

# ALTER TABLE artisti

# ADD CONSTRAINT nume\_de\_scena\_cons CHECK ( length(nume\_de\_scena) > 1 );

# ALTER TABLE artisti

# ADD CONSTRAINT gen\_muzical\_cons CHECK ( length(gen\_muzical) > 1 );

# ALTER TABLE artisti ADD CONSTRAINT artisti\_pk PRIMARY KEY ( id\_artist );

# CREATE TABLE bilete (

# data\_acces DATE NOT NULL,

# data\_expirare DATE NOT NULL,

# cnp VARCHAR2(13) NOT NULL,

# id\_festival NUMBER(2) NOT NULL,

# nume\_bilet VARCHAR2(10) NOT NULL

# );

# ALTER TABLE bilete

# ADD CONSTRAINT data\_expirare\_cons CHECK ( data\_expirare - data\_acces > 0 );

# ALTER TABLE bilete

# ADD CONSTRAINT bilete\_pk PRIMARY KEY ( cnp,

# id\_festival,

# nume\_bilet );

# CREATE TABLE festivaluri (

# id\_festival NUMBER(2) NOT NULL,

# locatie VARCHAR2(30) NOT NULL,

# nume\_oras VARCHAR2(30) NOT NULL,

# nr\_artisti NUMBER(2) NOT NULL

# );

# ALTER TABLE festivaluri

# ADD CONSTRAINT locatie\_cons CHECK ( length(locatie) > 1 );

# ALTER TABLE festivaluri

# ADD CONSTRAINT nume\_oras\_cons CHECK ( length(nume\_oras) > 0 );

# ALTER TABLE festivaluri ADD CONSTRAINT nr\_artisti\_cons CHECK ( nr\_artisti > 0 );

# ALTER TABLE festivaluri ADD CONSTRAINT festivaluri\_pk PRIMARY KEY ( id\_festival );

# CREATE TABLE spectacole (

# data\_spectacol DATE NOT NULL,

# ora\_start VARCHAR2(5) NOT NULL,

# ora\_stop VARCHAR2(5) NOT NULL,

# id\_artist NUMBER(2) NOT NULL,

# id\_festival NUMBER(2) NOT NULL,

# nr\_pauze\_spectacol NUMBER(2)

# );

# ALTER TABLE spectacole

# ADD CONSTRAINT oras\_cons CHECK ( length(ora\_start) = 5

# AND ( to\_number(substr(ora\_start, 1, 2)) BETWEEN 0 AND 24 )

# AND ( to\_number(substr(ora\_start, 4, 2)) BETWEEN 0 AND 59 )

# AND substr(ora\_start, 3, 1) = ':' );

# ALTER TABLE spectacole

# ADD CONSTRAINT orast\_cons CHECK ( length(ora\_stop) = 5

# AND ( to\_number(substr(ora\_stop, 1, 2)) BETWEEN 0 AND 24 )

# AND ( to\_number(substr(ora\_stop, 4, 2)) BETWEEN 0 AND 59 )

# AND substr(ora\_stop, 3, 1) = ':'

# AND ( to\_number(substr(ora\_stop, 1, 2)) > to\_number(substr(ora\_start, 1, 2)) ) );

# ALTER TABLE spectacole ADD CONSTRAINT nr\_pauze\_cons CHECK ( nr\_pauze\_spectacol >= 0 );

# ALTER TABLE spectacole ADD CONSTRAINT spectacole\_pk PRIMARY KEY ( id\_artist,

# id\_festival );

# CREATE TABLE spectatori (

# cnp VARCHAR2(13) NOT NULL,

# prenume VARCHAR2(35) NOT NULL,

# nume VARCHAR2(35) NOT NULL,

# telefon VARCHAR2(10) NOT NULL,

# email VARCHAR2(45) NOT NULL

# );

# ALTER TABLE spectatori

# ADD CONSTRAINT cnp\_cons CHECK ( REGEXP\_LIKE ( cnp,

# '^[1,2,5,6]\d{2}(0[1-9]|1[0-2])(0[1-9]|[12]\d|3[01])(0[1-9]|[1-4]\d|5[0-2]|99)(00[1-9]|0[1-9]\d|[1-9]\d\d)\d$'

# ) );

# ALTER TABLE spectatori

# ADD CONSTRAINT prenume\_cons CHECK ( length(prenume) > 1 );

# ALTER TABLE spectatori

# ADD CONSTRAINT nume\_spectator\_cons CHECK ( length(nume) > 1 );

# ALTER TABLE spectatori

# ADD CONSTRAINT telefon\_cons CHECK ( REGEXP\_LIKE ( telefon,

# '^(\+4|)?(07[0-8]{1}[0-9]{1}|02[0-9]{2}|03[0-9]{2}){1}?(\s|\.|\-)?([0-9]{3}(\s|\.|\-|)){2}$'

# ) );

# ALTER TABLE spectatori

# ADD CONSTRAINT email\_cons CHECK ( REGEXP\_LIKE ( email,

# '[a-z0-9.\_%-]+@[a-z0-9.\_%-]+\.[a-z]{2,4}' ) );

# ALTER TABLE spectatori ADD CONSTRAINT spectatori\_pk PRIMARY KEY ( cnp );

# CREATE TABLE tip\_bilet (

# nume\_bilet VARCHAR2(10) NOT NULL,

# pret\_bilet NUMBER(5) NOT NULL

# );

# ALTER TABLE tip\_bilet

# ADD CONSTRAINT nume\_bilet\_cons CHECK ( length(nume\_bilet) > 0 );

# ALTER TABLE tip\_bilet ADD CONSTRAINT pret\_bilet\_cons CHECK ( pret\_bilet > 0 );

# ALTER TABLE tip\_bilet ADD CONSTRAINT tip\_bilet\_pk PRIMARY KEY ( nume\_bilet );

# ALTER TABLE bilete

# ADD CONSTRAINT bilete\_festivaluri\_fk FOREIGN KEY ( id\_festival )

# REFERENCES festivaluri ( id\_festival );

# ALTER TABLE bilete

# ADD CONSTRAINT bilete\_spectatori\_fk FOREIGN KEY ( cnp )

# REFERENCES spectatori ( cnp );

# ALTER TABLE bilete

# ADD CONSTRAINT bilete\_tip\_bilet\_fk FOREIGN KEY ( nume\_bilet )

# REFERENCES tip\_bilet ( nume\_bilet );

# ALTER TABLE spectacole

# ADD CONSTRAINT spectacole\_artisti\_fk FOREIGN KEY ( id\_artist )

# REFERENCES artisti ( id\_artist );

# ALTER TABLE spectacole

# ADD CONSTRAINT spectacole\_festivaluri\_fk FOREIGN KEY ( id\_festival )

# REFERENCES festivaluri ( id\_festival );

# Alte obiecte din baza de date

CREATE SEQUENCE artisti\_id\_artist\_seq START WITH 1 NOCACHE ORDER;

CREATE OR REPLACE TRIGGER artisti\_id\_artist\_trg BEFORE

INSERT ON artisti

FOR EACH ROW

WHEN ( new.id\_artist IS NULL )

BEGIN

:new.id\_artist := artisti\_id\_artist\_seq.nextval;

END;

CREATE SEQUENCE festivaluri\_id\_festival\_seq START WITH 1 NOCACHE ORDER;

CREATE OR REPLACE TRIGGER festivaluri\_id\_festival\_trg BEFORE

INSERT ON festivaluri

FOR EACH ROW

WHEN ( new.id\_festival IS NULL )

BEGIN

:new.id\_festival := festivaluri\_id\_festival\_seq.nextval;

END

# Inserarea de date in tabelele bazei de date:

**---insert into festivaluri**

insert into festivaluri(Locatie, Nume\_oras, Nr\_artisti) values('Sala Palatului', 'Bucuresti', 15);

insert into festivaluri(Locatie, Nume\_oras, Nr\_artisti) values('Pietonalul Unirii', 'Botosani', 16);

insert into festivaluri(Locatie, Nume\_oras, Nr\_artisti) values('Palatul Culturii', 'Iasi', 17);

**---insert into artisti**

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('Smiley', 'Pop','Nemuritori');

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('Akcent', 'Pop','Ti-am promis');

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('Trooper', 'Rock','Tari ca muntii');

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('Vita de vie', 'Rock','Praf de stele');

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical) VALUES ('Holograf', 'Rock');

INSERT INTO artisti(Nume\_de\_scena, Piesa\_start) VALUES ('Vama veche', 'Perfect fara tine');

INSERT INTO artisti(Nume\_de\_scena, Piesa\_start) VALUES ('Argatu', 'Valea regilor');

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical) VALUES ('The motans', 'Pop');

INSERT INTO artisti(Nume\_de\_scena) VALUES ('Delia');

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('Brenciu', null, null);

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('Irina Rhymes', 'Pop', null);

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('Inna', 'Pop', null);

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('Alexandra Stan', 'Pop',null);

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('Antonia', 'Pop', 'Marabou');

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('Andra', 'Pop','Avioane de hartie');

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('Andreea Balan', null, null);

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('Alternosfera', 'Rock','Ploile nu vin');

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('B.U.G', 'Rap', null);

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('Speack', null,null);

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('Parazitii', 'Rap',null);

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('3 Sud Est', 'Pop','Amintirile');

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('Carla`s Dream', 'Pop','Sub pielea mea');

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('The Motans', 'Pop','Indispus');

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('Bosquito', 'Rock','Pepita');

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('Deliric', 'Rap' ,null);

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('Spike', 'Rap', null);

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('Iris', 'Rock', null);

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('Vescan', 'Rap','Tic-tac');

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('Anda', 'Pop', null);

**---insert into tip\_bilet**

insert into tip\_bilet values('class1',450);

insert into tip\_bilet values('class2',350);

insert into tip\_bilet values('class3',250);

insert into tip\_bilet values('vip',700);

**---insert into spectatori**

insert into spectatori values('1841115209291','Tudor','Ionescu','0722222222','TuPo@gmail.com');

insert into spectatori values('2310111400123','Teodora','Tamas','0752212222','teoTamas@yahoo.com');

insert into spectatori values('1810111400456','Vlad','Manescu','0742322129','VladTheMan@yahoo.com');

insert into spectatori values('1710111400789','Ionut','Pop','0742332822','Ionpopica@gmail.com');

insert into spectatori values('2210111400011','Mariana','Matei','0742372022','mMatei@gmail.com');

insert into spectatori values('2310111400211','Elena','Popescu','0742332321','ElenaPopescu@yahoo.com');

insert into spectatori values('1941115209291','Marian','Daniliuc','0762282022','Mari\_Dan@yahoo.com');

insert into spectatori values('2010111400123','Ionela','Pasarescu','0752200222','ionela.pas@yahoo.com');

insert into spectatori values('1310111400456','Vali','Ionescu','0742322000','Vali\_ion@yahoo.com');

insert into spectatori values('1010111400789','Alex','Vamanu','0741132822','AlexVam@gmail.com');

insert into spectatori values('2710111400011','Teodora','Ripiceanu','0752392022','ripi.teo@yahoo.com');

insert into spectatori values('2510111400211','Alexandra','Stan','0752535321','ale\_stan@yahoo.com');

insert into spectatori values('1210111400789','Alin','Baciu','0752305522','baciu\_alex121@gmail.com');

insert into spectatori values('2030111400011','Diana','Popescu','0763337202','DianaPopescu@yahoo.com');

insert into spectatori values('2110111400211','Ana','Sasescu','0782332821','AnaSas13131@yahoo.com');

**---insert into bilete**

insert into bilete values('22-MAR-2020','26-MAR-2020',(select cnp from spectatori where cnp ='1841115209291'),(select id\_festival from festivaluri where id\_festival = 1), 'class1');

insert into bilete values('23-MAR-2020','24-MAR-2020',(select cnp from spectatori where cnp ='2310111400123'),(select id\_festival from festivaluri where id\_festival = 1), 'class2');

insert into bilete values('25-MAR-2020','26-MAR-2020',(select cnp from spectatori where cnp ='1810111400456'),(select id\_festival from festivaluri where id\_festival = 1), 'vip');

insert into bilete values('22-MAR-2020','26-MAR-2020',(select cnp from spectatori where cnp ='1710111400789'),(select id\_festival from festivaluri where id\_festival = 1), 'vip');

insert into bilete values('24-MAR-2020','25-MAR-2020',(select cnp from spectatori where cnp ='2210111400011'),(select id\_festival from festivaluri where id\_festival = 1), 'class3');

insert into bilete values('9-AUG-2020','12-AUG-2020',(select cnp from spectatori where cnp ='2310111400211'),(select id\_festival from festivaluri where id\_festival = 2), 'class1');

insert into bilete values('9-AUG-2020','11-AUG-2020',(select cnp from spectatori where cnp ='1941115209291'),(select id\_festival from festivaluri where id\_festival = 2), 'class3');

insert into bilete values('10-AUG-2020','13-AUG-2020',(select cnp from spectatori where cnp ='2010111400123'),(select id\_festival from festivaluri where id\_festival = 2), 'class1');

insert into bilete values('11-AUG-2020','12-AUG-2020',(select cnp from spectatori where cnp ='1310111400456'),(select id\_festival from festivaluri where id\_festival = 2), 'vip');

insert into bilete values('10-AUG-2020','11-AUG-2020',(select cnp from spectatori where cnp ='1010111400789'),(select id\_festival from festivaluri where id\_festival = 2), 'class1');

insert into bilete values('18-SEP-2020','19-SEP-2020',(select cnp from spectatori where cnp ='2710111400011'),(select id\_festival from festivaluri where id\_festival = 3), 'class3');

insert into bilete values('19-SEP-2020','20-SEP-2020',(select cnp from spectatori where cnp ='2510111400211'),(select id\_festival from festivaluri where id\_festival = 3), 'class3');

insert into bilete values('18-SEP-2020','21-SEP-2020',(select cnp from spectatori where cnp ='1210111400789'),(select id\_festival from festivaluri where id\_festival = 3), 'vip');

insert into bilete values('20-SEP-2020','21-SEP-2020',(select cnp from spectatori where cnp ='2030111400011'),(select id\_festival from festivaluri where id\_festival = 3), 'class2');

insert into bilete values('19-SEP-2020','21-SEP-2020',(select cnp from spectatori where cnp ='2110111400211'),(select id\_festival from festivaluri where id\_festival = 3), 'class1');

---insert into spectacole

insert into spectacole values('22-MAR-20', '18:00','20:00',(select id\_artist from artisti where id\_artist = 1), (select id\_festival from festivaluri where id\_festival = 1),2);

insert into spectacole values('22-MAR-20', '16:30','18:00',(select id\_artist from artisti where id\_artist = 3), (select id\_festival from festivaluri where id\_festival = 1),null);

insert into spectacole values('22-MAR-20', '20:00','21:00',(select id\_artist from artisti where id\_artist = 7), (select id\_festival from festivaluri where id\_festival = 1),0);

insert into spectacole values('22-MAR-20', '21:00','23:00',(select id\_artist from artisti where id\_artist = 9), (select id\_festival from festivaluri where id\_festival = 1),3);

insert into spectacole values('23-MAR-20', '17:00','18:30',(select id\_artist from artisti where id\_artist = 2), (select id\_festival from festivaluri where id\_festival = 1),2);

insert into spectacole values('23-MAR-20', '19:00','20:00',(select id\_artist from artisti where id\_artist = 4), (select id\_festival from festivaluri where id\_festival = 1),null);

insert into spectacole values('23-MAR-20', '20:00','21:20',(select id\_artist from artisti where id\_artist = 5), (select id\_festival from festivaluri where id\_festival = 1),0);

insert into spectacole values('23-MAR-20', '21:30','22:00',(select id\_artist from artisti where id\_artist = 6), (select id\_festival from festivaluri where id\_festival = 1),3);

insert into spectacole values('23-MAR-20', '22:00','23:00',(select id\_artist from artisti where id\_artist = 10), (select id\_festival from festivaluri where id\_festival = 1),3);

insert into spectacole values('24-MAR-20', '19:00','21:00',(select id\_artist from artisti where id\_artist = 8), (select id\_festival from festivaluri where id\_festival = 1),1);

insert into spectacole values('24-MAR-20', '21:30','22:30',(select id\_artist from artisti where id\_artist = 16), (select id\_festival from festivaluri where id\_festival = 1),1);

insert into spectacole values('24-MAR-20', '22:30','23:45',(select id\_artist from artisti where id\_artist = 12), (select id\_festival from festivaluri where id\_festival = 1),1);

insert into spectacole values('25-MAR-20', '22:30','23:30',(select id\_artist from artisti where id\_artist = 13), (select id\_festival from festivaluri where id\_festival = 1),1);

insert into spectacole values('25-MAR-20', '19:30','21:00',(select id\_artist from artisti where id\_artist = 11), (select id\_festival from festivaluri where id\_festival = 1),1);

insert into spectacole values('25-MAR-20', '21:00','22:20',(select id\_artist from artisti where id\_artist = 14), (select id\_festival from festivaluri where id\_festival = 1),1);

insert into spectacole values('26-MAR-20', '17:30','18:30',(select id\_artist from artisti where id\_artist = 20), (select id\_festival from festivaluri where id\_festival = 1),2);

insert into spectacole values('26-MAR-20', '18:30','19:30',(select id\_artist from artisti where id\_artist = 22), (select id\_festival from festivaluri where id\_festival = 1),0);

insert into spectacole values('26-MAR-20', '20:00','21:00',(select id\_artist from artisti where id\_artist = 18), (select id\_festival from festivaluri where id\_festival = 1),1);

insert into spectacole values('26-MAR-20', '21:00','22:40',(select id\_artist from artisti where id\_artist = 17), (select id\_festival from festivaluri where id\_festival = 1),0);

insert into spectacole values('26-MAR-20', '22:40','23:50',(select id\_artist from artisti where id\_artist = 19), (select id\_festival from festivaluri where id\_festival = 1),2);

insert into spectacole values('09-AUG-20', '16:00','18:00',(select id\_artist from artisti where id\_artist = 10), (select id\_festival from festivaluri where id\_festival = 2),1);

insert into spectacole values('09-AUG-20', '18:30','19:30',(select id\_artist from artisti where id\_artist = 9), (select id\_festival from festivaluri where id\_festival = 2),null);

insert into spectacole values('09-AUG-20', '20:00','21:00',(select id\_artist from artisti where id\_artist = 8), (select id\_festival from festivaluri where id\_festival = 2),null);

insert into spectacole values('09-AUG-20', '21:00','23:00',(select id\_artist from artisti where id\_artist = 7), (select id\_festival from festivaluri where id\_festival = 2),2);

insert into spectacole values('10-AUG-20', '17:00','18:30',(select id\_artist from artisti where id\_artist = 1), (select id\_festival from festivaluri where id\_festival = 2),1);

insert into spectacole values('10-AUG-20', '19:00','20:00',(select id\_artist from artisti where id\_artist = 2), (select id\_festival from festivaluri where id\_festival = 2),null);

insert into spectacole values('10-AUG-20', '20:00','21:20',(select id\_artist from artisti where id\_artist = 3), (select id\_festival from festivaluri where id\_festival = 2),1);

insert into spectacole values('10-AUG-20', '21:30','22:00',(select id\_artist from artisti where id\_artist = 4), (select id\_festival from festivaluri where id\_festival = 2),null);

insert into spectacole values('10-AUG-20', '22:00','23:00',(select id\_artist from artisti where id\_artist = 5), (select id\_festival from festivaluri where id\_festival = 2),null);

insert into spectacole values('11-AUG-20', '19:00','21:00',(select id\_artist from artisti where id\_artist = 11), (select id\_festival from festivaluri where id\_festival = 2),1);

insert into spectacole values('11-AUG-20', '21:30','22:30',(select id\_artist from artisti where id\_artist = 6), (select id\_festival from festivaluri where id\_festival = 2),0);

insert into spectacole values('11-AUG-20', '22:30','23:30',(select id\_artist from artisti where id\_artist = 28), (select id\_festival from festivaluri where id\_festival = 2),0);

insert into spectacole values('12-AUG-20', '17:00','18:00',(select id\_artist from artisti where id\_artist = 15), (select id\_festival from festivaluri where id\_festival = 2),2);

insert into spectacole values('12-AUG-20', '19:00','20:00',(select id\_artist from artisti where id\_artist = 13), (select id\_festival from festivaluri where id\_festival = 2),0);

insert into spectacole values('12-AUG-20', '20:30','21:30',(select id\_artist from artisti where id\_artist = 12), (select id\_festival from festivaluri where id\_festival = 2),0);

insert into spectacole values('12-AUG-20', '21:30','22:20',(select id\_artist from artisti where id\_artist = 14), (select id\_festival from festivaluri where id\_festival = 2),1);

insert into spectacole values('12-AUG-20', '22:30','23:45',(select id\_artist from artisti where id\_artist = 16), (select id\_festival from festivaluri where id\_festival = 2),2);

insert into spectacole values('13-AUG-20', '18:30','19:30',(select id\_artist from artisti where id\_artist = 24), (select id\_festival from festivaluri where id\_festival = 2),1);

insert into spectacole values('13-AUG-20', '20:00','21:40',(select id\_artist from artisti where id\_artist = 18), (select id\_festival from festivaluri where id\_festival = 2),null);

insert into spectacole values('13-AUG-20', '21:40','22:40',(select id\_artist from artisti where id\_artist = 17), (select id\_festival from festivaluri where id\_festival = 2),2);

insert into spectacole values('13-AUG-20', '22:40','23:50',(select id\_artist from artisti where id\_artist = 19), (select id\_festival from festivaluri where id\_festival = 2),0);

insert into spectacole values('18-SEP-20', '16:00','18:00',(select id\_artist from artisti where id\_artist = 1), (select id\_festival from festivaluri where id\_festival = 3),2);

insert into spectacole values('18-SEP-20', '18:30','19:30',(select id\_artist from artisti where id\_artist = 3), (select id\_festival from festivaluri where id\_festival = 3),0);

insert into spectacole values('18-SEP-20', '20:00','21:00',(select id\_artist from artisti where id\_artist = 5), (select id\_festival from festivaluri where id\_festival = 3),0);

insert into spectacole values('18-SEP-20', '21:00','22:00',(select id\_artist from artisti where id\_artist = 7), (select id\_festival from festivaluri where id\_festival = 3),null);

insert into spectacole values('18-SEP-20', '22:30','23:30',(select id\_artist from artisti where id\_artist = 9), (select id\_festival from festivaluri where id\_festival = 3),1);

insert into spectacole values('19-SEP-20', '18:00','20:00',(select id\_artist from artisti where id\_artist = 2), (select id\_festival from festivaluri where id\_festival = 3),2);

insert into spectacole values('19-SEP-20', '20:00','22:20',(select id\_artist from artisti where id\_artist = 4), (select id\_festival from festivaluri where id\_festival = 3),0);

insert into spectacole values('19-SEP-20', '22:30','23:30',(select id\_artist from artisti where id\_artist = 6), (select id\_festival from festivaluri where id\_festival = 3),1);

insert into spectacole values('20-SEP-20', '17:00','18:00',(select id\_artist from artisti where id\_artist = 13), (select id\_festival from festivaluri where id\_festival = 3),0);

insert into spectacole values('20-SEP-20', '18:00','19:00',(select id\_artist from artisti where id\_artist = 8), (select id\_festival from festivaluri where id\_festival = 3),null);

insert into spectacole values('20-SEP-20', '19:00','21:00',(select id\_artist from artisti where id\_artist = 10), (select id\_festival from festivaluri where id\_festival = 3),1);

insert into spectacole values('20-SEP-20', '21:00','22:00',(select id\_artist from artisti where id\_artist = 11), (select id\_festival from festivaluri where id\_festival = 3),null);

insert into spectacole values('20-SEP-20', '22:00','23:00',(select id\_artist from artisti where id\_artist = 12), (select id\_festival from festivaluri where id\_festival = 3),0);

insert into spectacole values('21-SEP-20', '17:00','18:00',(select id\_artist from artisti where id\_artist = 17), (select id\_festival from festivaluri where id\_festival = 3),null);

insert into spectacole values('21-SEP-20', '18:30','19:30',(select id\_artist from artisti where id\_artist = 19), (select id\_festival from festivaluri where id\_festival = 3),0);

insert into spectacole values('21-SEP-20', '19:30','20:30',(select id\_artist from artisti where id\_artist = 23), (select id\_festival from festivaluri where id\_festival = 3),1);

insert into spectacole values('21-SEP-20', '20:30','21:30',(select id\_artist from artisti where id\_artist = 22), (select id\_festival from festivaluri where id\_festival = 3),0);

insert into spectacole values('21-SEP-20', '21:30','22:20',(select id\_artist from artisti where id\_artist = 21), (select id\_festival from festivaluri where id\_festival = 3),null);

insert into spectacole values('21-SEP-20', '22:30','23:45',(select id\_artist from artisti where id\_artist = 20), (select id\_festival from festivaluri where id\_festival = 3),1);

# Interogarea bazei de date

---Afisarea valorilor introduse---

select \* from artisti;

select \* from bilete;

select \* from festivaluri;

select \* from spectacole;

select \* from spectatori;

select \* from tip\_bilet;

---Afisarea spectacolelor din luna martie a anului 2020---

select data\_spectacol

from spectacole sp

where to\_char(data\_spectacol,'fmMON') = 'MAR'

and TO\_NUMBER(to\_char(data\_spectacol,'fmYYYY')) = 2020;

---Afisarea numelui artistilor si a datei in care au spectacol la festivalul din Bucuresti, ordonat dupa data spectacolului---

select ar.nume\_de\_scena, sp.data\_spectacol

from artisti ar, spectacole sp, festivaluri f

where ar.id\_artist = sp.id\_artist

and sp.id\_festival = f.id\_festival

and f.nume\_oras = 'Bucuresti'

order by sp.data\_spectacol;

---Afisarea numelui persoanelor si a tipului biletului achizitionat ordonat dupa pretul biletului descrescator---

select sp.nume, tb.nume\_bilet

from spectatori sp, tip\_bilet tb, bilete b

where sp.cnp = b.cnp

and b.nume\_bilet = tb.nume\_bilet

order by tb.pret\_bilet desc;

---Afisarea numelui si a piesei de inceput a tuturor artistilor care au ca gen muzical rock, in caz ca piesa de inceput nu este anuntata, se va afisa textul 'indisponibil'---

select nume\_de\_scena, nvl2(piesa\_start,piesa\_start,'indisponibil')

from artisti

where lower(gen\_muzical) like('rock');

---Afisarea datei si a orei de inceput si sfarsit a spectacolelor la care poate partcipa persoana cu mail-ul TuPo@gmail.com, in ordine crescatoare dupa data, iar in cazul aceleasi date ascendent dupa ora de start--

select sp.data\_spectacol, sp.ora\_start,sp.ora\_stop

from spectacole sp, spectatori spec, bilete b, festivaluri f

where spec.cnp = b.cnp

and b.id\_festival = f.id\_festival

and b.id\_festival = sp.id\_festival

and sp.data\_spectacol BETWEEN b.data\_acces and b.data\_expirare

and spec.email like('TuPo@gmail.com')

order by sp.data\_spectacol asc, sp.ora\_start asc;

---Afisarea prenumelui persoanelor care stau in fata scenei(vip) la concertul lui Smiley din Botosani---

select spec.prenume

from spectatori spec, bilete b, tip\_bilet tb, festivaluri f, spectacole sp, artisti a

where spec.cnp = b.cnp

and b.nume\_bilet= tb.nume\_bilet

and b.id\_festival = f.id\_festival

and sp.id\_festival = f.id\_festival

and sp.id\_artist = a.id\_artist

and lower(a.nume\_de\_scena) like('smiley')

and upper(f.nume\_oras) = 'BOTOSANI'

and lower(tb.nume\_bilet) = 'vip';

---Afisarea locatiilor precum si a datei la care trebuie sa ajunga trupa Holograf pentru a-si desfasura concertele---

select sp.data\_spectacol, f.locatie

from artisti a, spectacole sp, festivaluri f

where a.id\_artist = sp.id\_artist

and sp.id\_festival = f.id\_festival

and lower(a.nume\_de\_scena) = 'holograf';

--- Sa se afiseze toate spectacole care se desfasoara inainte de ora 20:00---

select sp.ora\_start, sp.ora\_stop

from spectacole sp, festivaluri f

where sp.id\_festival = f.id\_festival

and to\_number(substr(sp.ora\_stop,1,2))<20;

---Sa se afiseze la ce ora incepe concertele trupa The Motans---

select sp.ora\_start

from spectacole sp, artisti a, festivaluri f

where a.id\_artist = sp.id\_artist

and sp.id\_festival = f.id\_festival

and lower(a.nume\_de\_scena) ='the motans';

---Afisarea prenumelui, pretului si a tipului biletului cumparat de persoanele care merg la concertul Trooper din Bucuresti si au peste 40 ani---

select spec.prenume, tb.nume\_bilet,tb.pret\_bilet

from spectatori spec, bilete b, tip\_bilet tb, festivaluri f, spectacole sp, artisti a

where spec.cnp = b.cnp

and b.nume\_bilet= tb.nume\_bilet

and b.id\_festival = f.id\_festival

and sp.id\_festival = f.id\_festival

and sp.id\_artist = a.id\_artist

and lower(a.nume\_de\_scena) like('trooper')

and upper(f.nume\_oras) = 'BUCURESTI'

and to\_number(to\_char(sysdate,'fmyyyy'))- to\_number(concat('19',substr(spec.cnp,2,2))) >=40;

# Constrangerile si instructiuni de incalcare a constrangerilor bazei de date

**Constrangeri pentru tabela Artisti**

* Id\_artist primary key: **pentru identificare in mod unic**

# ALTER TABLE artisti ADD CONSTRAINT artisti\_pk PRIMARY KEY ( id\_artist );

# INSERT INTO artisti(id\_artist,Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES (1,'dada', 'dada','dada')

# Error report -

# ORA-00001: unique constraint (PROIECT.ARTISTI\_PK) violated

* Nume\_de\_scena check length and not null: **verificare nume real si obligare la inserare**

nume\_de\_scena VARCHAR2(30) NOT NULL

ADD CONSTRAINT nume\_de\_scena\_cons CHECK ( length(nume\_de\_scena) > 1 );

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES (null, 'dada','dada')

Error report -

ORA-01400: cannot insert NULL into ("PROIECT"."ARTISTI"."NUME\_DE\_SCENA")

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('a', 'dada','dada')

Error report -

ORA-02290: check constraint (PROIECT.NUME\_DE\_SCENA\_CONS) violated

* Gen\_muzical check length: **verificare nume real**

# ALTER TABLE artisti

# ADD CONSTRAINT gen\_muzical\_cons CHECK ( length(gen\_muzical) > 1 );

Error starting at line : 2 in command -

INSERT INTO artisti(Nume\_de\_scena, Gen\_muzical, Piesa\_start) VALUES ('ba', '1','dada')

Error report -

ORA-02290: check constraint (PROIECT.GEN\_MUZICAL\_CONS) violated

**Constrangeri pentru tabela Spectacole**

* Data\_spectacol check with sysdate: **necesar ca festivalul sa aiba o data valabila**

insert into spectacole values('22-MAR-17', '18:00','20:00',(select id\_artist from artisti where id\_artist = 29), (select id\_festival from festivaluri where id\_festival = 3),2)

Error report -

ORA-00001: : check constraint (PROIECT.SPECTACOLE\_Data\_spectacol) violated

* Ora\_start check if it has format hh:mm and not null: **verificare ora corecta**

insert into spectacole values('22-MAR-16', '18::00','20:00',(select id\_artist from artisti where id\_artist = 30), (select id\_festival from festivaluri where id\_festival = 3),2)

Error report -

ORA-12899: value too large for column "PROIECT"."SPECTACOLE"."ORA\_START" (actual: 6, maximum: 5)

* Ora\_stop check if it has format hh:mm and not null: **verificare ora corecta**

insert into spectacole values('22-MAR-16', '18:00','201:00',(select id\_artist from artisti where id\_artist = 30), (select id\_festival from festivaluri where id\_festival = 3),2)

Error report -

ORA-12899: value too large for column "PROIECT"."SPECTACOLE"."ORA\_STOP" (actual: 6, maximum: 5)

* Id\_artist and ID\_festival primary foreign key: **pentru identificare in mod unic si existenta foreign pentru relatii**

insert into spectacole values('22-MAR-16', '18:00','20:00',(select id\_artist from artisti where id\_artist = 1), (select id\_festival from festivaluri where id\_festival = 3),2)

Error report -

ORA-00001: unique constraint (PROIECT.SPECTACOLE\_PK) violated

**Constrangeri pentru tabela Festivaluri**

* Id\_festival primary key: **pentru identificare in mod unic**

insert into festivaluri(id\_festival,Locatie, Nume\_oras, Nr\_artisti) values(1,'Palatul sasa', 'asa', 17)

Error report -

ORA-00001: unique constraint (PROIECT.FESTIVALURI\_PK) violated

* Locatie check length and not null: **verificare nume real si obligare la inserare**

insert into festivaluri(id\_festival,Locatie, Nume\_oras, Nr\_artisti) values(10,'1', 'asa', 17)

Error report -

ORA-02290: check constraint (PROIECT.LOCATIE\_CONS) violated

insert into festivaluri(id\_festival,Locatie, Nume\_oras, Nr\_artisti) values(10,null, '21312', 17)

Error report -

ORA-01400: cannot insert NULL into ("PROIECT"."FESTIVALURI"."LOCATIE")

* Nume\_oras check length and not null: **verificare nume real si obligare la inserare**

insert into festivaluri(id\_festival,Locatie, Nume\_oras, Nr\_artisti) values(10,'1', null, 17)

Error report -

ORA-01400: cannot insert NULL into ("PROIECT"."FESTIVALURI"."NUME\_ORAS")

**Constrangeri pentru tabela Bilete**

* Data\_acces check with sysdate: **necesar ca biletul sa aiba o data valabila**

insert into bilete values('22-MAR-2010','26-MAR-2020',(select cnp from spectatori where cnp ='1841115209291'),(select id\_festival from festivaluri where id\_festival = 1), 'class1');

Error report -

ORA-00001: : check constraint (PROIECT.BILETE\_Data\_acces) violated

* Data\_expirare check with Data\_acces: **necesar ca biletul sa aiba o data valabila(>Data\_acces)**

insert into bilete values('22-MAR-2020','20-MAR-2020',(select cnp from spectatori where cnp ='1841115209291'),(select id\_festival from festivaluri where id\_festival = 1), 'class1')

Error report -

ORA-02290: check constraint (PROIECT.DATA\_EXPIRARE\_CONS) violated

* Cnp, ID\_festival, nume\_bliet primary foreign key **pentru identificare in mod unic si existenta foreign pentru relatii**

insert into bilete values('22-MAR-2020','24-MAR-2020',(select cnp from spectatori where cnp ='1841115209291'),(select id\_festival from festivaluri where id\_festival = 1), 'class1')

Error report -

ORA-00001: unique constraint (PROIECT.BILETE\_PK) violated

**Constrangeri pentru tabela Tip\_bilet**

* Nume\_bilet primary key: **pentru identificare in mod unic**

insert into tip\_bilet values('class1',450)

Error report -

ORA-00001: unique constraint (PROIECT.TIP\_BILET\_PK) violated

* Pret\_bilet not null and check if it is bigger than 0 **verificare valaore reala si obligare la inserare**

insert into tip\_bilet values('class7',null)

Error report -

ORA-01400: cannot insert NULL into ("PROIECT"."TIP\_BILET"."PRET\_BILET")

insert into tip\_bilet values('class7',-50)

Error report -

ORA-02290: check constraint (PROIECT.PRET\_BILET\_CONS) violated

**Constrangeri pentru tabela Spectatori**

* Cnp primary key and check cnp: **pentru identificare in mod unic si verificare cnp real**

insert into spectatori values('1841115209291','Tudor','Ionescu','0722222222','TuPo@gmail.com')

Error report -

ORA-00001: unique constraint (PROIECT.SPECTATORI\_PK) violated

* Prenume check length and not null: **verificare nume real si obligare la inserare**

insert into spectatori values('1841115009291',null,'Ionescu','0722222222','TuPo@gmail.com')

Error report -

ORA-01400: cannot insert NULL into ("PROIECT"."SPECTATORI"."PRENUME")

insert into spectatori values('1841115009291','1','Ionescu','0722222222','TuPo@gmail.com')

Error report -

ORA-02290: check constraint (PROIECT.PRENUME\_CONS) violated

* Nume check length and not null: **verificare nume real si obligare la inserare**

insert into spectatori values('1841115009291','211','1','0722222222','TuPo@gmail.com')

Error report –

insert into spectatori values('1841115009291','211',null,'0722222222','TuPo@gmail.com')

Error report -

ORA-01400: cannot insert NULL into ("PROIECT"."SPECTATORI"."NUME")

ORA-02290: check constraint (PROIECT.NUME\_SPECTATOR\_CONS) violated

* Telefon check number and not null: **verificare telefon real si obligare la inserare**

insert into spectatori values('1841115009291','211','211','0a22242222','TuPo@gmail.com')

Error report -

ORA-02290: check constraint (PROIECT.TELEFON\_CONS) violated

insert into spectatori values('1841115009291','211','211',null,'TuPo@gmail.com')

Error report -

ORA-01400: cannot insert NULL into ("PROIECT"."SPECTATORI"."TELEFON")

* Email check e-mail and not null: **verificare e-mail real si obligare la inserare**

insert into spectatori values('1841115209291','Tudor','Ionescu','0722222222',null)

Error report -

ORA-01400: cannot insert NULL into ("PROIECT"."SPECTATORI"."EMAIL")

insert into spectatori values('1841115209291','Tudor','Ionescu','0722222222','sa')

Error report -

ORA-02290: check constraint (PROIECT.EMAIL\_CONS) violated