

# **Proiect Baze de Date**

## **“Liga de Baschet”**

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# **1. Descrierea modelului.**

In cadrul unei ligi masculine de baschet, 16 echipe iau parte la fiecare sezon, ce se desfasoara pe parcursul unui an.

Fiecare sezon este format din mai multe etape ce se joaca saptamanal, astfel incat pana la final, fiecare echipa sa fi jucat cu toate celelalte cate doua meciuri (acasa si in deplasare).

Fiecare echipa este formata din cel putin 5 jucatori, un antrenor, un preparator fizic si un nutritionist. Fiecare echipa detine arena proprie dintr-un anumit oras, unde va juca meciurile acasa.

Pe tot parcursul sezonului se retin statisticile jucatorilor (puncte marcare, cosuri de 2 puncte, cosuri de 3 puncte, aruncari libere, recuperari, faulturi, pase decisive, aparitii) aferente fiecărei etape astfel incat la final sa se calculeze clasamentul echipelor si sa se acorde diverse premii individuale (pentru cele mai multe puncte marcate, cele mai multe recuperari, cele mai multe pase decisive).

La fiecare meci exista 3 arbitrii, 3 comentatori si o echipa medicala.

## 2. Prezentarea constrângerilor.

- Intr-un moment cel mult un sezon poate fi în curs de desfășurare
- Un sezon conține 30 de etape (pentru a permite echipelor să joace fiecare cu fiecare de exact 2 ori)
- La un sezon iau parte 16 echipe de baschet
- O etapă se desfășoară pe parcursul unei săptămâni calendaristice, iar o singură etapă se poate desfășura într-o săptămână
- O etapă conține 8 meciuri (pentru ca fiecare echipă să joace câte un meci).
- Fiecare echipă joacă exact un meci în fiecare etapă.
- Meciul este jucat între două echipe, una din ele. Echipa ce deține arena este considerată ca joacă acasă, iar cealaltă în deplasare.
- Un meci nu se poate termina dacă cele două echipe au număr egal de puncte.
- La organizarea fiecărui meci iau parte 3 arbitrii, 3 comentatori și o echipă medicală.
- Fiecare echipă este formată din minim 5 jucători, un antrenor, un preparator fizic, un nutritionist. Nerespectarea minimului de 5 jucători duce la descalificare și la pierderea tuturor meciurilor.
- Fiecare echipă deține o arena aflată într-o locație, iar o arena aparține unei singure echipe.
- Un arbitru, comentator sau echipă medicală pot lua parte la un singur meci la moment dat.
- Un jucător, antrenor, preparator fizic sau nutritionist poate fi angajat de către o singură echipă la un moment dat.
- Statisticile sunt realizate la fiecare etapă și sunt păstrate în mod individual, pentru fiecare jucător.
- Premiile individuale sunt acordate unui singur jucător

### 3. Descrierea entităților.

- SEZON:
  - competitie desfasurata pe parcursul unui an la care participa mai multe echipe de baschet, ce joaca meciuri intre ele in cadrul mai multor etape
  - La finalul sezonului se stabileste clasamentul general si se acorda premiile individuale
  - Cheia primara este id\_sezon
- ETAPA:
  - O delimitare a sezonului in functie de saptamana calendaristica, in cadrul careia fiecare echipa joaca exact un meci
  - Cheia primara este id\_etapa
- MECI:
  - Eveniment sportiv la care participa doua echipe si se desfasoara in arena uneia dintre ele (care e considerata echipa gazda, cealalta fiind echipa oaspete).
  - Pentru organizare sunt necesari 3 arbitrii, 3 comentatori si o echipa medicala
  - Cheia primara este id\_meci
- ECHIPA:
  - O organizatie ce detine jucatori, un antrenor, un preparator fizic , un nutritionist si o arena si participa la sezoane.
  - Cheia primara este id echipa
- ARENA:
  - O cladire apartinand unei echipe de baschet ce se afla intr-o locatie si care gazduieste meciuri
  - Cheia primara este id\_arena
- LOCATIE:
  - Adresa (tara, oras, strada, nr) la care se gasteste o arena
  - Cheia primara este id\_locatie
- JUCATOR:
  - Sportiv ce face parte dintr-o echipa si are capacitatea de a participa la meciuri
  - Cheia primara este id\_jucator
- ANGAJAT
  - Angajat ce detine anumite responsabilitati in cadrul unei echipe
  - Cheia primara este id\_angajat
- ANTRENOR:
  - Subentitate a entitatii ANGAJAT, persoana ce este responsabila cu pregatirea jucatorilor, alegerea lotului pentru meciuri si efectuarea schimbarilor dintr-un meci
  - Cheia primara este id\_angajat
- PREPARATOR\_FIZIC:
  - Subentitate a entitatii ANGAJAT, persoana ce este responsabil cu mentinerea intr-o stare optima a abilitatilor fizice ale jucatorilor.
  - Cheia primara este id\_angajat
- NUTRITIONIST:
  - Subentitate a entitatii ANGAJAT, persoana ce este responsabil cu organizarea planului nutritional al fiecarui jucator din cadrul echipei.
  - Cheia primara este id\_angajat

- **ARBITRU:**
  - Persoana calificata pentru a arbitra meciuri de baschet. In cadrul unui meci la care face parte din organizare, este responsabil cu asigurarea respectarii regulamentului, mentinerea scorului si declararii echipei invingatoare la finalul meciului.
  - Cheia primara este id\_arbitru
- **ECHIPA\_MEDICALA:**
  - Persoana calificata pentru a asigura asistenta medicala. In cadrul unui meci la care face parte din organizare, este responsabila cu asigurarea asistentei medicale persoanelor implicate intr-un meci.
  - Cheia primara este id echipa\_medicala
- **COMENTATOR:**
  - Persoana ce comenteaza un meci de baschet pentru a fi transmis spectatorilor.
  - Cheia primara este id\_comentator
- **STATISTICA:**
  - Un set de date ce contine informatii despre performanta unui jucator in cadrul unui meci.
  - Cheia primara este id\_statistica
- **PREMIU:**
  - O distinctie acordata la finalul unui sezon unui jucator pentru diferite realizari din cadrul sezonului respectiv.
  - Cheia primara este id\_premiu

## 4. Descrierea relațiilor.

SEZON\_contine\_ETAPA:

- Relatie ce leaga entitatile Sezon si Etapa (ce etape fac parte dintr-un anumit sezon?)
- 1 - M(0)

SEZON\_jucat\_ECHIPA

- Relatie ce leaga entitatile Sezon si Echipa (ce echipa joaca un sezon?)
- M(0) – M(1)

ETAPA\_contine\_MECI

- Relatie ce leaga entitatile ETAPA si MECI (care meciuri se joaca in cadrul unei etape?)
- 1 – M(0)

MECI\_jucat\_acasa\_ECHIPA

- Relatie ce leaga entitatile Meci si Echipa (ce echipe joaca un meci ca echipa gazda?)
- M(0) - 1

MECI\_jucat\_deplasare\_ECHIPA

- Relatie ce leaga entitatile Meci si Echipa (ce echipe joaca un meci ca echipa oaspete?)
- M(0) - 1

MECI\_arbitrat\_ARBITRU

- Relatie ce leaga entitatile Meci si Arbitru (ce arbitrii arbitreaza un meci?)
- M(0) - 3

MECI\_comentat\_COMENTATOR

- Relatie ce leaga entitatile Meci si Comentator (ce comentatori comenteaza un meci?)
- M(0) - 3

MECI\_asigurat\_ECHIPA\_MEDICALA

- Relatie ce leaga entitatile Meci si Echipa\_medicala (ce echipa\_medicala asigura asistenta medicala in cadrul unui meci?)
- M(0) - 1

MECI\_contine\_STATISTICA

- Relatie ce leaga entitatile Meci si Statistica (care sunt statisticile intr-un meci?)
- 1 – M(0)

ECHIPA\_detine\_ARENA

- Relatie ce leaga entitatile Echipa si Arena (care este arena unei echipe?)
- 1 – 1

ECHIPA\_contine\_JUCATOR

- Relatie ce leaga entitatile Echipa is Jucatori (din care jucatori este formata echipa?)
- 1 – M(0)

ECHIPA\_antrenata\_ANTRENOR

- Relatie ce leaga entitatile Echipa is Antrenor (de care antrenor este antrenata o echipa?)



- 1 – 1

ECHIPA\_pregatita\_PREPARATOR\_FIZIC

- relatie ce leaga entitatile Echipa si Preparator\_fizic (care preparator\_fizic asigura pregatirea fizica a echipei?)

- 1 – 1(0)

ECHIPA\_are\_NUTRITIONIST

- Relatie ce leaga entitatile Echipa si Nutritionist (care nutritionist asigura nutritia optima a echipei?)

- 1 – 1(0)

ARENA\_are\_LOCATIE

- Relatie ce leaga entitatile Arena si Locatie (unde este amplasata arena?)

- 1 – 1

JUCATOR\_are\_STATISTICA

- Relatie ce leaga entitatile Jucator si Statistica (care sunt statisticile unui jucator?)

- 1 – M(0)

JUCATOR\_castiga\_PREMIU\_in\_SEZON

- Relatie ce leaga entitatile Jucator, Premiu si Sezon (ce premii a castigat un jucator?)

- 1 (jucator) – M(0) (premiu) - M(0) (sezon)

## 5. Descrierea atributelor.

### SEZON:

- # id\_sezon – variabila de tip intreg (lung max 7), reprezinta codul unui sezon
- data\_incepere – variabila de tip data calendaristica, reprezinta data de incepere a sezonului
- data\_finalizare - variabila de tip data calendaristica, reprezinta data de sfarsit a sezonului

### ETAPA:

- # id\_etapa – variabila de tip intreg (lung max 7), reprezinta codul unei etape
- @ id\_sezon - variabila de tip intreg (lung max 7), reprezinta codul sezonului din care face parte etapa, trebuie sa corespunda cu o valoare a cheii primare din tabelul SEZON
- numar – variabila de tip intreg (lung max 2), reprezinta a cata etapa din cadrul sezonului este cea curenta

### MECI:

- # id\_meci - variabila de tip intreg (lung max 7), reprezinta codul unui meci
- @ id\_etapa - variabila de tip intreg (lung max 7), reprezinta codul etapei din care face parte meciul, trebuie sa corespunda cu o valoare a cheii primare din tabelul ETAPA
- @ id echipa\_gazda - variabila de tip intreg (lung max 7), reprezinta codul echipei gazde, trebuie sa corespunda cu o valoare a cheii primare din tabelul ECHIPA
- @ id echipa\_oaspete - variabila de tip intreg (lung max 7), reprezinta codul echipei oaspete, trebuie sa corespunda cu o valoare a cheii primare din tabelul ECHIPA
- @ id echipa\_medicala - variabila de tip intreg (lung max 7), reprezinta codul echipei medicale care asigura asistenta medicala, trebuie sa corespunda cu o valoare a cheii primare din tabelul ECHIPA\_MEDICALA
- scor\_gazda – variabila de tip intreg (lung max 3), reprezinta numarul de puncte marcate de echipa gazda
- scor\_oaspete - variabila de tip intreg (lung max 3), reprezinta numarul de puncte marcate de echipa oaspete

### ECHIPA:

- # id echipa – variabila de tip intreg (lung max 7), reprezinta codul unui echipe
- @ id\_arena – variabila de tip intreg (lung max 7), reprezinta codul arenei pe care o detine echipa, trebuie sa corespunda cu o valoare a cheii primare din tabelul ARENA
- @ id\_antrenor – variabila de tip intreg (lung max 7), reprezinta codul antrenorului ce antreneaza echipa, trebuie sa corespunda cu o valoare a cheii primare din tabelul ANTRENOR
- @ id\_preparator – variabila de tip intreg (lung max 7), reprezinta codul preparatorului fizic care pregateste echipa, trebuie sa corespunda cu o valoare a cheii primare din tabelul PREPARATOR\_FIZIC
- @ id\_nutritionist – variabila de tip intreg (lung max 7), reprezinta codul nutritionistului ce se ocupa de nutritia echipei, trebuie sa corespunda cu o valoare a cheii primare din tabelul NUTRITIONIST
- nume – variabila de tip caracter (lung max 32), reprezinta numele echipei
- an\_infiintare - variabile da tip intreg (lung max 4), reprezinta anul in care a fost infiintata echipa

### ARENA:

- # id\_arena - variabila de tip intreg (lung max 7), reprezinta codul unui arene
- @ id\_locatie: - variabila de tip intreg (lung max 7), reprezinta codul locatie unde se afla arena, trebuie sa corespunda cu valoarea unei chei primare din tabelul LOCATIE
- nume - variabila de tip caracter (lung max 32), reprezinta numele arenei
- locuri - variabila de tip intreg (lung max 6), reprezinta numarul de locuri pentru spectatori din arena

#### LOCATIE

- # id\_locatie - variabila de tip intreg (lung max 75), reprezinta codul unei locatii
- tara - variabila de tip caracter (lung max 32)
- oras - variabila de tip caracter (lung max 32)
- strada - variabila de tip caracter (lung max 32)
- numar – variabila de tip intreg (lung max 4)

#### JUCATOR

- # id\_jucator - variabila de tip intreg (lung max 7), reprezinta codul unui jucator
- @ id\_echipa – variabila de tip intreg (lung max 7), reprezinta codul echipei din care face parte jucatorul, trebuie sa corespunda cu valoarea unei chei primare din tabelul ECHIPA
- nume – variabila de tip caracter (lung max 32)
- prenume – variabila de tip caracter (lung max 32)
- inaltime - variabila de tip numeric (lung 3-2), reprezinta inaltimea jucatorului exprimata in metrii
- salariu – variabile de tip intreg (lung max 7), reprezinta salariul annual al unui jucator

#### ANGAJAT

- # id\_angajat - variabila de tip intreg (lung max 7), reprezinta codul unui angajat
- nume – variabila de tip caracter (lung max 32)
- prenume – variabila de tip caracter (lung max 32)
- salariu – variabile de tip intreg (lung max 7), reprezinta salariul lunar al unui angajat

#### ANTRENOR

- # id\_angajat - variabila de tip intreg (lung max 7), reprezinta codul unui antrenor

#### PREPARATOR\_FIZIC

- # id\_angajat - variabila de tip intreg (lung max 7), reprezinta codul unui preparator fizic

#### NUTRITIONIST

- # id\_angajat - variabila de tip intreg (lung max 7), reprezinta codul unui nutritionist

#### ARBITRU

- # id\_arbitru - variabila de tip intreg (lung max 7), reprezinta codul unui arbitru
- nume – variabila de tip caracter (lung max 32)
- prenume – variabila de tip caracter (lung max 432)
- data\_obtinere\_licenta – variabila de tip data calendaristica, reprezinta data la care arbitrul a obtinut licenta

#### ECHIPA\_MEDICALA

- # id\_echipa\_medicala - variabila de tip intreg (lung max 7), reprezinta codul unei echipe medicale

## COMENTATOR

- # id\_comentator - variabila de tip intreg (lung max 7), reprezinta codul unui comentator
- nume – variabila de tip caracter (lung max 32)
- prenume – variabila de tip caracter (lung max 32)

## STATISTICA

- # id\_statistica - variabila de tip intreg (lung max 7), reprezinta codul unei statistici
- @ id\_meci – variabila de tip intreg (lung max 7), reprezinta codul meciului din care face parte statistica, trebuie sa corespunda cu o valoare a unei chei primare din tabelul MECI
- @ id\_jucator - variabila de tip intreg (lung max 7), reprezinta codul jucatorului pentru care a fost efectuata statistica , trebuie sa corespunda cu o valoare a unei chei primare din tabelul JUCATOR
- minute\_jucate – variabila de tip intreg (lung max 2)
- aruncari\_2pct - variabila de tip intreg (lung max 2), reprezinta numarul de aruncari de 2 puncte incercate de un jucator intr-un meci
- aruncari\_3pct -variabila de tip intreg (lung max 2) - variabila de tip intreg (lung max 3), reprezinta numarul de aruncari de 3 puncte incercate de un jucator intr-un meci
- aruncari\_libere - variabila de tip intreg (lung max 2) - variabila de tip intreg (lung max 3), reprezinta numarul de aruncari libere incercate de un jucator intr-un meci
- aruncari\_2pct\_marcate - variabila de tip intreg (lung max 2), reprezinta numarul de aruncari de 2 puncte marcate de un jucator intr-un meci
- aruncari\_3pct\_marcate -variabila de tip intreg (lung max 2) - variabila de tip intreg (lung max 3), reprezinta numarul de aruncari de 3 puncte marcate de un jucator intr-un meci
- aruncari\_libere\_marcate - variabila de tip intreg (lung max 2) - variabila de tip intreg (lung max 3), reprezinta numarul de aruncari libere marcate de un jucator intr-un meci
- pase\_decisive – variabila de tip intreg (lung max 2), reprezinta numarul de pase decisive efectuate de un jucator intr-un meci
- recuperari - variabila de tip intreg (lung max 2), reprezinta numarul de recuperari efectuate de un jucator intr-un meci
- faulturi - variabila de tip intreg (lung max 2), reprezinta numarul de faulturi de un jucator intr-un meci

## PREMIU

- # id\_premiu - variabila de tip intreg (lung max 7), reprezinta codul unui premiu
- denumire – variabila de tip caracter (lung max 64), reprezinta denumirea premiului

## SEZON\_jucat\_ECHIPA

- @ id\_sezon - variabila de tip intreg (lung max 7), reprezinta codul sezonului, trebuie sa corespunda cu o valoare a unei chei primare din tabelul SEZON
- @ id echipa- variabila de tip intreg (lung max 7), reprezinta codul echipei, trebuie sa corespunda cu o valoare a unei chei primare din tabelul ECHIPA

## MECI\_arbitrat\_ARBITRU

- @ id\_meci- variabila de tip intreg (lung max 7), reprezinta codul meciului, trebuie sa corespunda cu o valoare a unei chei primare din tabelul MECI
- @ id\_arbitru- variabila de tip intreg (lung max 7), reprezinta codul arbitrului, trebuie sa corespunda cu o valoare a unei chei primare din tabelul ARBITRU

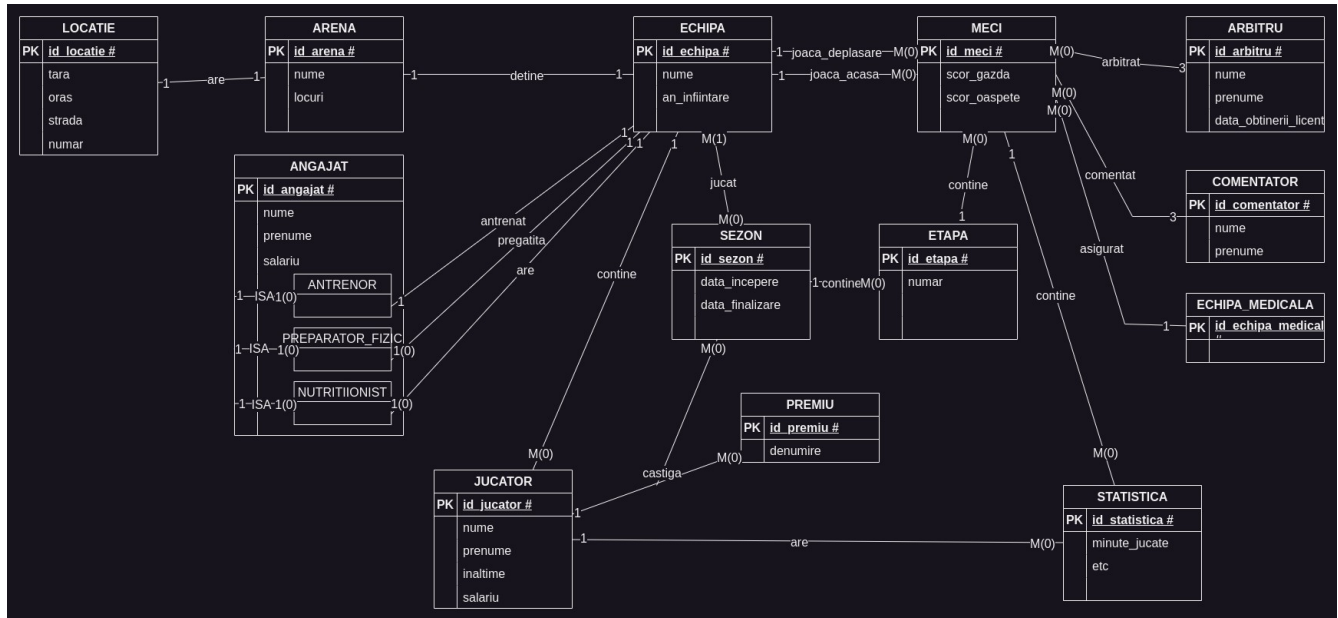
#### MECI\_comentat\_COMENTATOR

- @ id\_meci- variabila de tip intreg (lung max 7), reprezinta codul meciului, trebuie sa corespunda cu o valoare a unei chei primare din tabelul MECI
- @ id\_comentator- variabila de tip intreg (lung max 7), reprezinta codul comentatorului, trebuie sa corespunda cu o valoare a unei chei primare din tabelul COMENTATOR

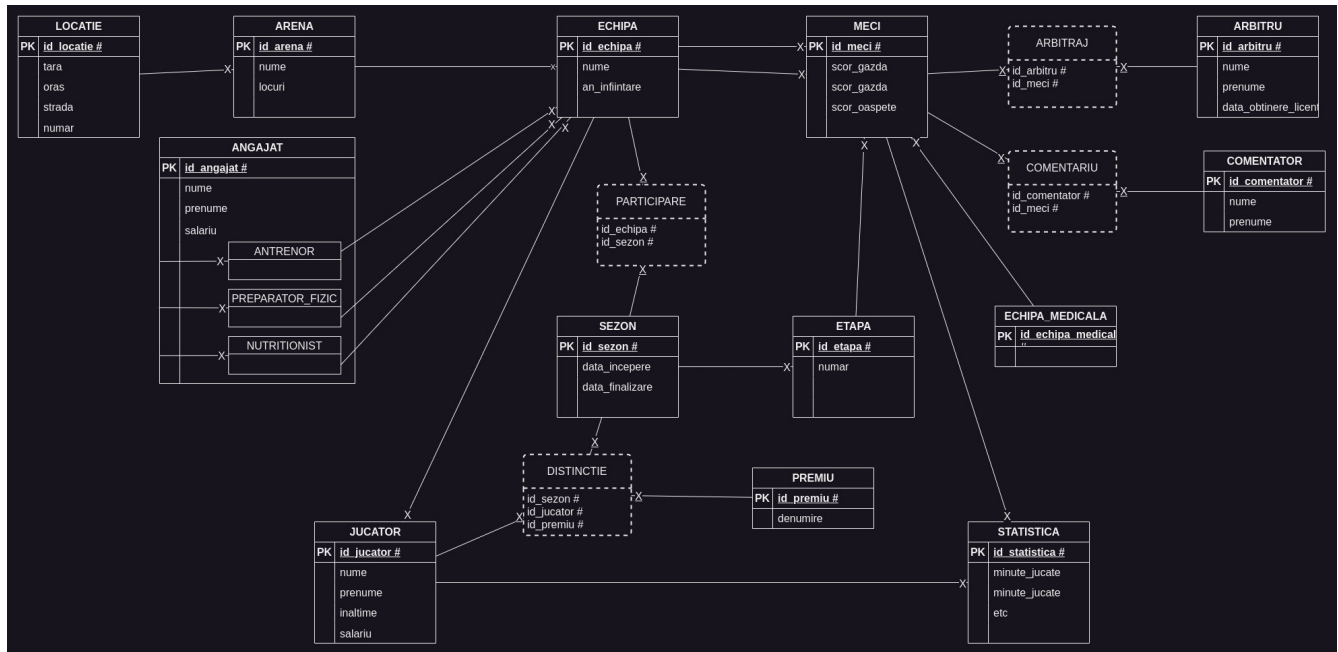
#### JUCATOR\_castiga\_PREMIU\_in\_SEZON

- @ id\_jucator- variabila de tip intreg (lung max 7), reprezinta codul jucatorului, trebuie sa corespunda cu o valoare a unei chei primare din tabelul JUCATOR
- @ id\_premiu- variabila de tip intreg (lung max 7), reprezinta codul premiului, trebuie sa corespunda cu o valoare a unei chei primare din tabelul PREMIU
- @ id\_sezon- variabila de tip intreg (lung max 7), reprezinta codul sezonului, trebuie sa corespunda cu o valoare a unei chei primare din tabelul SEZON
  - numele relatiei va fi 'castiga'

## 6. Diagrama Entitate-Relatie.



## 7. Diagrama Conceptuala



## 8. Schemele relationale.

- SEZON (id\_sezon#, data\_incepere, data\_finalizare)
- ETAPA (id\_etapa#, id\_sezon@, numar)
- MECI (id\_meci#, id\_etapa@, id echipa\_gazda@, id echipa\_oaspete@, id echipa\_medicala@, scor\_gazda, scor\_oaspete)
- ECHIPA (id echipa#, id\_arena@, id\_antrenor@, id\_preparator@, id\_nutritionist@, nume, an\_infiintare)
- ARENA (id\_arena#, id\_locatie@, nume, locuri)
- LOCATIE: (id\_locatie#, tara, oras, strada, numar)
- JUCATOR: (id\_jucator#, id echipa@, nume, prenume, inaltime, salariu)
- ANGAJAT (id\_angajat#, nume, prenume, salariu)
- ANTRENOR: (id\_angajat#)
- PREPARATOR\_FIZIC: (id\_angajat#)
- NUTRITIONIST: (id\_angajat#)
- ARBITRU: (id\_arbitru#, nume, prenume, data\_obtinere\_licenta)
- ECHIPA\_MEDICALA: (id echipa\_medicala#)
- COMENTATOR: (id\_comentator#, nume, prenume)
- STATISTICA: (id\_statistica#, id\_meci@, id\_jucator@, minute\_jucate, aruncari\_2pct, aruncari\_3pct, aruncari\_libere, aruncari\_2pct\_marcate, aruncari\_3pct\_marcate, aruncari\_libere\_marcate, pase\_decisive, recuperari, faulturi)
- PREMIU: (id\_premiu#, denumire)
- - PARTICIPARE (id\_sezon#, id echipa#)
  - ARBITRAJ: (id\_meci#, id\_arbitru#)
  - COMENTARIU: (id\_meci#, id\_comentator#)
  - DISTINCTIE: (id\_sezon#, id\_jucator#, id\_premiu#)



## 9. Exemplificarea Non-FN1, Non-FN2, Non-FN3

### Non FN1

SEZON	
PK	<u>id_sezon #</u>
	data_incepere
	data_finalizare
	id_echipe_participante

Nu este respectata Forma Normala 1 deoarece atributul

id\_echipe\_participante contine 16 id-uri ale echipelor,

astfel nefiind un atribut atomic.

Solutia consta in crearea unei relatii M-M intre SEZON si ECHIPA.

### Non FN2

Spre exemplu, daca in relatia JUCATOR castiga PREMIU in SEZON, aveam atributul denumire\_premiu, nu ar fi fost in Forma Normala 3 deoarece atributul denumire\_premiu depinde de id\_premiu, care este doar o parte din cheia primara compusa.

Solutia consta in crearea tablei PREMIU care sa contina atributul denumire.

### Non FN3

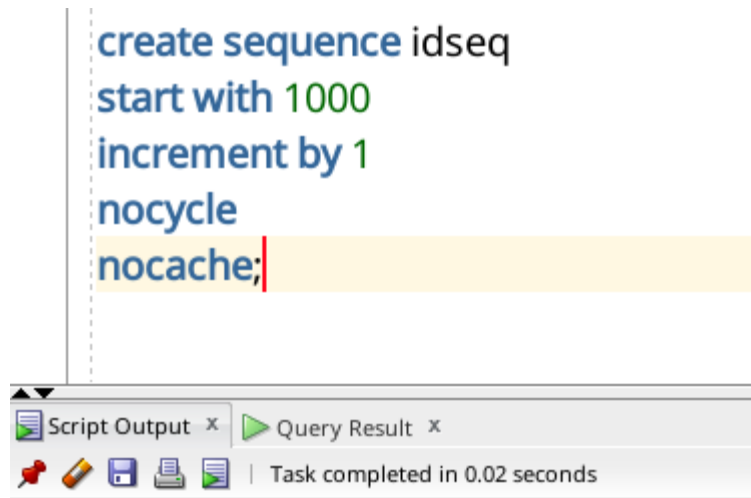
JUCATOR	
PK	<u>id_jucator #</u>
	nume
	prenume
	inaltime
	salariu
	nume echipa
	an_infiintare echipa

Nu este respectata Forma Normala 3 deoarece atributul an\_infiintare echipa nu depinde de cheia primara a Tabelei, ci de atributul nume echipa.

Solutia consta in crearea unei noi table ECHIPA cu attributele id echipa, nume si an\_infiintare.

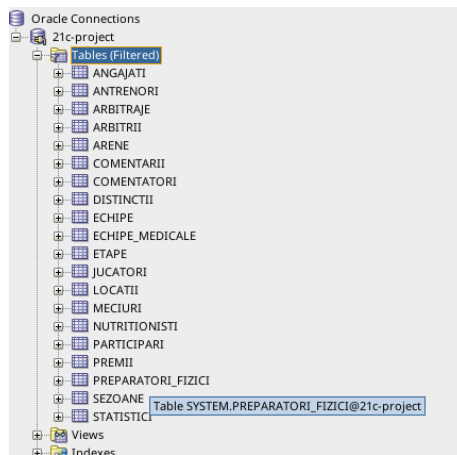
## 10. Secventa pentru inserarea datelor

```
create sequence idseq  
start with 1000  
increment by 1  
nocycle  
nocache;
```



Sequence IDSEQ created.

# 11. Crearea tabelelor



```
create table sezoane (
  id_sezon number(7) primary key,
  data_incepere date,
  data_finalizare date
);

create table etape(
  id_etapa number(7) primary key,
  id_sezon number(7) references sezoane(id_sezon),
  numar number(2)
);

create table angajati(
  id_angajat number(7) primary key,
  nume varchar2(32),
  prenume varchar2(32),
  salariu number(7)
);

create table antrenori(
  id_angajat number(7) primary key references angajati(id_angajat)
);

create table preparatori_fizici(
  id_angajat number(7) primary key references angajati(id_angajat)
);
```

```
create table nutritionisti(
  id_angajat number(7) primary key references angajati(id_angajat)
);

create table locatii (
  id_locatie number(7) primary key,
  tara varchar2(32),
  oras varchar2(32),
  strada varchar2(32),
  nr number(4)
);

create table arene (
  id_arena number(7) primary key,
  id_locatie number(7) references locatii(id_locatie),
  locuri number(6)
);

create table echipe (
  id echipa number(7) primary key,
  id_arena number(7) references arene(id_arena),
  id_antrenor number(7) references antrenori(id_angajat),
  id_preparator number(7) references preparatori_fizici(id_angajat),
  id_nutritionist number(7) references nutritionisti(id_angajat),
  nume varchar2(32),
  an_infiintare number(4)
);
```

```
create table jucatori(
  id_jucator number(7) primary key,
  id echipa number(7) references echipe(id echipa),
  nume varchar2(32),
  prenume varchar2(32),
  inaltime number(3, 2),
  salariu number(7)
);

create table echipe_medicale(
  id echipa_medicala number(7) primary key
);

create table meciuri (
  id_meci number(7) primary key,
  id_etapa number(7) references etape(id_etapa),
  id echipa_gazda number(7) references echipe(id echipa),
  id echipa_oaspete number(7) references echipe(id echipa),
  id echipa_medicala number(7) references echipe_medicale(id echipa_medicala),
  scor_gazda number(3),
  scor_oaspete number(3)
);
```

Table SEZOANE created.

Table ETAPE created.

Table ANGAJATI created.

Table ANTRENORI created.

Table PREPARATORI\_FIZICI created.

Table NUTRITIONISTI created.

Table LOCATII created.

Table ARENE created.

Table ECHIBE created.

Table JUCATORI created.

Table ECHIBE\_MEDICALE created.

Table MECIURI created.

```
create table arbitrii(
id_arbitru number(7) primary key,
nume varchar2(32),
prenume varchar2(32),
data_obtinere_licenta date
);
```

```
create table comentatori (
id_comentator number(7) primary key,
nume varchar2(32),
prenume varchar2(32)
);
```

```
create table statistici(
id_statistica number(7) primary key,
id_meci number(7) references meciuri(id_meci),
id_jucator number(7) references jucatori(id_jucator),
minute_jucate number(2),
aruncari_2pct number(2),
aruncari_2pct_marcate number(2),
aruncari_3pct number(2),
aruncari_3pct_marcate number(2),
aruncari_libere number(2),
aruncari_libere_marcate number(2),
pase_decisive number(2),
recuperari number(2),
faulturi number(2)
);
```

```
create table comentarii(
id_meci number(7) references meciuri(id_meci),
id_comentator number(7) references comentatori(id_comentator),
constraint pk_comentarii primary key(id_meci, id_comentator)
);
```

```
create table distinctii(
id_sezon number(7) references sezoane(id_sezon),
id_jucator number(7) references jucatori(id_jucator),
id_premiu number(7) references premii(id_premiu),
constraint pk_distinctii primary key(id_sezon, id_jucator, id_premiu)
);
```

```
savepoint after_create;
```

```
create table premii(
id_premiu number(7) primary key,
denumire varchar2(64)
);
```

```
create table participari (
id_sezon number(7) references sezoane(id_sezon),
id echipa number(7) references echipe(id echipa),
constraint pk_participari primary key(id_sezon, id echipa)
);
```

```
create table arbitraje(
id_meci number(7) references meciuri(id_meci),
id_arbitru number(7) references arbitrii(id_arbitru),
constraint pk_arbitraje primary key(id_meci, id_arbitru)
);
```

Table ARBITRII created.

Table COMENTATORI created.

Table STATISTICI created.

Table COMENTARII created.

Table DISTINCTII created.

Savepoint created.

Table PREMII created.

Table PARTICIPARI created.

Table ARBITRAJE created.

```
create table sezoane (
id_sezon number(7) primary key,
data_incepere date,
data_finalizare date
);
```

```
create table etape(
id_etapa number(7) primary key,
id_sezon number(7) references sezoane(id_sezon),
numar number(2)
);
```

```
create table angajati(
id_angajat number(7) primary key ,
nume varchar2(32),
prenume varchar2(32),
salariu number(7)
);
```

```
create table antrenori(
id_angajat number(7) primary key references angajati(id_angajat)
);
```

```
create table preparatori_fizici(
```

```
id_angajat number(7) primary key references angajati(id_angajat)
);
```

```
create table nutritionisti(
id_angajat number(7) primary key references angajati(id_angajat)
);
```

```
create table locatii (
id_locatie number(7) primary key,
tara varchar2(32),
oras varchar2(32),
strada varchar2(32),
nr number(4)
);
```

```
create table arene (
id_arena number(7) primary key,
id_locatie number(7) references locatii(id_locatie),
nume varchar2(32),
locuri number(6)
);
```

```
create table echipe (
id echipa number(7) primary key,
id_arena number(7) references arene(id_arena),
id_antrenor number(7) references antrenori(id_angajat),
id_preparator number(7) references preparatori_fizici(id_angajat),
id_nutritionist number(7) references nutritionisti(id_angajat),
nume varchar2(32),
an_infiintare number(4)
);
```

```
create table jucatori(
id_jucator number(7) primary key,
id echipa number(7) references echipe(id echipa),
nume varchar2(32),
prenume varchar2(32),
inaltime number(3, 2),
salariu number(7)
);
```

```
create table echipe_medicale(
id echipa_medicala number(7) primary key
);
```

```
create table meciuri (
id_meci number(7) primary key,
id_etapa number(7) references etape(id_etapa),
id echipa_gazda number(7) references echipe(id echipa),
id echipa_oaspete number(7) references echipe(id echipa),
id echipa_medicala number(7) references echipe_medicale(id echipa_medicala),
scor_gazda number(3),
scor_oaspete number(3)
);
```

```
create table arbitrii(
```

```

id_arbitru number(7) primary key,
nume varchar2(32),
prenume varchar2(32),
data_obtinere_licenta date
);

create table comentatori (
id_comentator number(7) primary key,
nume varchar2(32),
prenume varchar2(32)
);

create table statistici(
id_statistica number(7) primary key,
id_meci number(7) references meciuri(id_meci),
id_jucator number(7) references jucatori(id_jucator),
minute_jucate number(2),
aruncari_2pct number(2),
aruncari_2pct_marcate number(2),
aruncari_3pct number(2),
aruncari_3pct_marcate number(2),
aruncari_libere number(2),
aruncari_libere_marcate number(2),
pase_decisive number(2),
recuperari number(2),
faulturi number(2)
);

create table premii(
id_premiu number(7) primary key,
denumire varchar2(64)
);

create table participari (
id_sezon number(7) references sezoane(id_sezon),
id echipa number(7) references echipe(id echipa),
constraint pk_participari primary key(id_sezon, id echipa)
);

create table arbitraje(
id_meci number(7) references meciuri(id_meci),
id_arbitru number(7) references arbitrii(id_arbitru),
constraint pk_arbitraje primary key(id_meci, id_arbitru)
);

create table comentarii(
id_meci number(7) references meciuri(id_meci),
id_comentator number(7) references comentatori(id_comentator),
constraint pk_comentarii primary key(id_meci, id_comentator)
);

create table distinctii (
id_sezon number(7) references sezoane(id_sezon),
id_jucator number(7) references jucatori(id_jucator),
id_premiu number(7) references premii(id_premiu),
constraint pk_distinctii primary key(id_sezon, id_jucator, id_premiu)

```

);

savepoint after\_create;

select * from angajati;				
ID_ANGAJAT	NUME	PRENUME	SALARIU	
30	1064 Kim	Asher	18200	
31	1065 Nguyen	Dylan	16300	
32	1066 Lopez	Asher	18000	
33	1067 Lee	Gideon	14900	
34	1068 Wong	Ethan	14200	
35	1069 Wong	Ethan	11000	
36	1070 Brown	Isaac	14200	
37	1071 Brown	Maxwell	19500	
38	1072 Khan	Oscar	13500	
39	1073 Brown	Gideon	16800	
40	1074 Taylor	Nathan	13000	
41	1075 Smith	Isaac	20000	
42	1076 Ali	Miles	17200	
43	1077 Singh	Caleb	17900	
44	1078 Lopez	Finn	20000	
45	1079 Kim	Finn	17300	
46	1080 Hernandez	Oliver	14100	
47	1081 Patel	Leo	14700	
48	1082 Brown	Caleb	13100	

ANGAJATI

select * from antrenori;				
ID_ANGAJAT	NUME	PRENUME	SALARIU	
1	1035			
2	1036			
3	1037			
4	1038			
5	1039			
6	1040			
7	1041			
8	1042			
9	1043			
10	1044			
11	1045			
12	1046			
13	1047			
14	1048			
15	1049			
16	1050			

ANTRENORI

select * from arbitraje;				
ID_MECI	ID_ANGAJAT	ID_ANGAJAT2	SALARIU	
703	1449	1460		
704	1450	1457		
705	1450	1458		
706	1450	1459		
707	1451	1457		
708	1451	1458		
709	1452	1457		
710	1452	1460		
711	1452	1459		
712	1453	1456		
713	1453	1457		
714	1453	1458		
715	1454	1459		
716	1454	1457		
717	1454	1458		
718	1455	1460		
719	1455	1457		
720	1455	1459		

ARBITRAJE

select * from arbitrii;				
ID_ARBITRII	NUME	PRENUME	DATA_OTOMNIE_LICENTA	
1	1456 Lee	Sebastian	03-MAY-70	
2	1457 Brown	Sebastian	25-DEC-99	
3	1458 Wilson	Oscar	20-JAN-76	
4	1459 Chen	Isaac	07-JUL-91	
5	1460 Chen	Jasper	27-FEB-91	

ARBITRII

select * from arene;				
ID_ARENE	ID_JUCATOR	ID_JUCATOR2	LOCULUI	
1	1099	1083 The Thunderdome	31000	
2	1100	1084 The Coliseum	21000	
3	1101	1085 The Pit	29000	
4	1102	1086 The Garden	24000	
5	1103	1087 The Staples Center	27000	
6	1104	1088 The Oracle	37000	
7	1105	1089 The Hoop House	31000	
8	1106	1090 The Den	20000	
9	1107	1091 The Arena	39000	
10	1108	1092 The Thunderdome	30000	
11	1109	1093 The Dome	37000	
12	1110	1094 The Palace	31000	
13	1111	1095 The Madhouse	30000	
14	1112	1096 The Pavilion	36000	
15	1113	1097 The Buzzer Beater	31000	
16	1114	1098 The Swiss Center	39000	

ARENE

select * from comentarii;				
ID_MECI	ID_COMENTARIU	ID_COMENTARIU2	SALARIU	
703	1449	1463		
704	1450	1461		
705	1450	1465		
706	1450	1462		
707	1451	1462		
708	1451	1465		
709	1452	1464		
710	1452	1461		
711	1452	1465		
712	1453	1462		
713	1453	1465		
714	1453	1463		
715	1454	1461		
716	1454	1464		
717	1454	1463		
718	1455	1464		
719	1455	1461		
720	1455	1465		

COMENTARII

select * from comentatori;				
ID_COMENTATOR	NUME	PRENUME		
1	1461 Lopez	Dylan		
2	1462 Chen	Harrison		
3	1463 Nguyen	Era		
4	1464 Patel	Wyatt		
5	1465 Thomas	Nathan		

COMENTATORI

select * from distinctii;				
ID_SEZON	ID_JUCATOR	ID_PREMIU		
7	1001	1187	1477	
8	1001	1143	1478	
9	1001	1163	1479	
10	1001	1194	1480	
11	1002	1197	1476	
12	1002	1165	1477	
13	1002	1210	1478	
14	1002	1179	1479	
15	1002	1131	1480	
16	1003	1141	1476	
17	1003	1202	1477	
18	1003	1189	1478	
19	1003	1191	1479	
20	1003	1142	1480	
21	1004	1131	1476	
22	1004	1201	1477	
23	1004	1195	1478	
24	1004	1143	1479	
25	1004	1181	1480	

DISTINCTII

Select \* from echipe;

All Rows Fetched: 16 in 0.004 seconds

ID_ECHIPE	ID_ANGAJAT	ID_ANGAJAT2	ID_PREPARATOR	ID_NUTRITIONIST	NUME	AN_INIETARE
1	1115	1099	1035	1051	1067 Lightning Bolts	2006
2	1116	1100	1036	1052	1068 Thunderbirds	1973
3	1117	1101	1037	1053	1069 Wildcats	2008
4	1118	1102	1038	1054	1070 Heatwave	2001
5	1119	1103	1039	1055	1071 Hurricanes	1985
6	1120	1104	1040	1056	1072 Jaguars	1975
7	1121	1105	1041	1057	1073 Patriots	2007
8	1122	1106	1042	1058	1074 Titans	1993
9	1123	1107	1043	1059	1075 Vikings	2004
10	1124	1108	1044	1060	1076 Dragons	2000
11	1125	1109	1045	1061	1077 Raptors	1990
12	1126	1110	1046	1062	1078 Warriors	2009
13	1127	1111	1047	1063	1079 Hornets	1992
14	1128	1112	1048	1064	1080 Sharks	1988
15	1129	1113	1049	1065	1081 Lions	2003
16	1130	1114	1050	1066	1082 Knights	1974

ECHIPE

select * from echipe_medicale;				
ID_ECHIPE	NUME	PRENUME		
1	1211			
2	1212			
3	1213			
4	1214			
5	1215			

ECHIPE\_MEDICALE

select * from etape;				
ID_ETAPA	ID_SEZON	ID_NUMAR		
12	1016	1000	12	
13	1017	1000	13	
14	1018	1000	14	
15	1019	1000	15	
16	1020	1000	16	
17	1021	1000	17	
18	1022	1000	18	
19	1023	1000	19	
20	1024	1000	20	
21	1025	1000	21	
22	1026	1000	22	
23	1027	1000	23	
24	1028	1000	24	
25	1029	1000	25	
26	1030	1000	26	
27	1031	1000	27	
28	1032	1000	28	
29	1033	1000	29	
30	1034	1000	30	

ETAPE

select * from jucatori;				
ID_JUCATOR	ID_ECHIPE	NUME	PRENUME	SALARIU
63	1192	1127 Wilson	Miles	1,86 42000
64	1193	1127 Garcia	Gideon	2,06 36000
65	1194	1127 Wilson	Leo	1,85 49000
66	1195	1127 Wong	Dylan	2,02 34000
67	1196	1128 Hernandez	Finn	1,88 47000
68	1197	1128 Ali	Finn	2 43000
69	1198	1128 Hernandez	Ethan	1,95 45000
70	1199	1128 Kim	Gideon	1,89 45000
71	1200	1128 Wong	Gideon	2,18 32000
72	1201	1129 Brown	Oscar	1,98 38000
73	1202	1129 Singh	Jasper	2,19 46000
74	1203	1129 Smith	Finn	2,18 44000
75	1204	1129 Lopez	Era	1,85 30000
76	1205	1129 Ali	Sebastian	2,11 36000
77	1206	1130 Taylor	Gideon	1,93 48000
78	1207	1130 Gonzalez	Leo	2,19 32000
79	1208	1130 Davis	Silas	1,96 45000
80	1209	1130 Wong	Gideon	2,11 43000
81	1210	1130 Lee	Wyatt	1,83 40000

JUCATORI

select * from locatii;				
ID_LOCULUI	NUME	PRENUME		
1	1083 USA	New York City	Fifth Avenue	742
2	1084 USA	Los Angeles	Hollywood Boulevard	6801
3	1085 USA	Las Vegas	Las Vegas Boulevard	3570
4	1086 USA	Chicago	Michigan Avenue	875
5	1087 USA	San Francisco	Lombard Street	1099
6	1088 USA	Miami	Ocean Drive	100
7	1089 USA	Orlando	International Drive	8000
8	1090 USA	Houston	NASA Road 1	1601
9	1091 USA	Seattle	Pike Place Market	85
10	1092 USA	Washington D.C.	1600 Pennsylvania Avenue NW	1500
11	1093 USA	Boston	Fenway Park	4
12	1094 USA	Atlanta	Peachtree Street	303
13	1095 USA	Dallas	Dealey Plaza	411
14	1096 USA	Denver	16th Street Mall	1001
15	1097 USA	New Orleans	Bourbon Street	500
16	1098 USA	San Diego	Balboa Park	1549

LOCATII

select * from meciuri;				
ID_MECI	ID_ETAPA	ID_ECHIPE_GAZDA	ID_ECHIPE_GASITA	SCOR_GAZDA
222	1437	1032	1128	1212
223	1438	1032	1127	1214
224	1439	1032	1126	1215
225	1440	1033	1117	1212
226	1441	1033	1116	1214
227	1442	1033	1130	1214
228	1443	1033	1129	1212
229	1444	1033	1128	1211
230	1445	1033	1127	1212
231	1446	1033	1126	1213
232	1447	1033	1125	1214
233	1448	1034	1116	1213
234	1449	1034	1130	1214
235	1450	1034	1129	1211
236	1451	1034	1128	1215
237	1452	1034	1127	1212
238	1453	1034	1126	1211
239	1454	1034	1125	1212
240	1455	1034	1124	1213

MECIURI

select * from nutritionisti;				
ID_ANGAJAT	NUME	PRENUME		
1	1067			
2	1068			
3	1069			
4	1070			
5	1071			
6	1072			
7	1073			
8	1074			
9	1075			
10	1076			
11	1077			
12	1078			
13	1079			
14	1080			
15	1081			
16	1082			

NUTRITIONISTI

<pre>select * from participari;</pre>	<pre>select * from premii;</pre>	<pre>select * from preparatori_fizici;</pre>
<b>PARTICIPARI</b>	<b>PREMII</b>	<b>PREPARATORI_FIZICI</b>
<pre>select * from sezoane;</pre>	<pre>select * from statistici;</pre>	
<b>SEZOANE</b>	<b>STATISTICI</b>	

## Codul pentru Inserarea Datelor:

```
insert into sezoane values(idseq.nextval, to_date('15-08-2023', 'DD-MM-YYYY'), to_date('10-06-2024', 'DD-MM-YYYY'));
insert into sezoane values(idseq.nextval, to_date('15-08-2022', 'DD-MM-YYYY'), to_date('10-06-2023', 'DD-MM-YYYY'));
insert into sezoane values(idseq.nextval, to_date('15-08-2021', 'DD-MM-YYYY'), to_date('10-06-2022', 'DD-MM-YYYY'));
insert into sezoane values(idseq.nextval, to_date('15-08-2020', 'DD-MM-YYYY'), to_date('10-06-2021', 'DD-MM-YYYY'));
insert into sezoane values(idseq.nextval, to_date('15-08-2019', 'DD-MM-YYYY'), to_date('10-06-2020', 'DD-MM-YYYY'));
```

```
insert into etape values(idseq.nextval, 1000, 1);
insert into etape values(idseq.nextval, 1000, 2);
insert into etape values(idseq.nextval, 1000, 3);
insert into etape values(idseq.nextval, 1000, 4);
insert into etape values(idseq.nextval, 1000, 5);
insert into etape values(idseq.nextval, 1000, 6);
insert into etape values(idseq.nextval, 1000, 7);
insert into etape values(idseq.nextval, 1000, 8);
insert into etape values(idseq.nextval, 1000, 9);
insert into etape values(idseq.nextval, 1000, 10);
insert into etape values(idseq.nextval, 1000, 11);
insert into etape values(idseq.nextval, 1000, 12);
insert into etape values(idseq.nextval, 1000, 13);
insert into etape values(idseq.nextval, 1000, 14);
insert into etape values(idseq.nextval, 1000, 15);
insert into etape values(idseq.nextval, 1000, 16);
insert into etape values(idseq.nextval, 1000, 17);
insert into etape values(idseq.nextval, 1000, 18);
insert into etape values(idseq.nextval, 1000, 19);
insert into etape values(idseq.nextval, 1000, 20);
insert into etape values(idseq.nextval, 1000, 21);
insert into etape values(idseq.nextval, 1000, 22);
insert into etape values(idseq.nextval, 1000, 23);
insert into etape values(idseq.nextval, 1000, 24);
insert into etape values(idseq.nextval, 1000, 25);
insert into etape values(idseq.nextval, 1000, 26);
insert into etape values(idseq.nextval, 1000, 27);
insert into etape values(idseq.nextval, 1000, 28);
insert into etape values(idseq.nextval, 1000, 29);
insert into etape values(idseq.nextval, 1000, 30);
```



```

insert into angajati values(idseq.nextval, 'Davis', 'Isaac', 19400);
insert into angajati values(idseq.nextval, 'Taylor', 'Ethan', 13400);
insert into angajati values(idseq.nextval, 'Davis', 'Gabriel', 12800);
insert into angajati values(idseq.nextval, 'Lee', 'Oliver', 13500);
insert into angajati values(idseq.nextval, 'Patel', 'Finn', 13200);
insert into angajati values(idseq.nextval, 'Gonzalez', 'Asher', 17400);
insert into angajati values(idseq.nextval, 'Taylor', 'Ethan', 14500);
insert into angajati values(idseq.nextval, 'Anderson', 'Ezra', 13500);
insert into angajati values(idseq.nextval, 'Chen', 'Ethan', 10000);
insert into angajati values(idseq.nextval, 'Wong', 'Sebastian', 10300);
insert into angajati values(idseq.nextval, 'Wong', 'Ezra', 18600);
insert into angajati values(idseq.nextval, 'Chen', 'Caleb', 17400);
insert into angajati values(idseq.nextval, 'Chen', 'Leo', 15700);
insert into angajati values(idseq.nextval, 'Wong', 'Isaac', 14300);
insert into angajati values(idseq.nextval, 'Kim', 'Asher', 12300);
insert into angajati values(idseq.nextval, 'Chen', 'Isaac', 14600);
insert into angajati values(idseq.nextval, 'Hernandez', 'Asher', 10300);
insert into angajati values(idseq.nextval, 'Wilson', 'Leo', 14400);
insert into angajati values(idseq.nextval, 'Brown', 'Caleb', 16300);
insert into angajati values(idseq.nextval, 'Anderson', 'Sebastian', 10100);
insert into angajati values(idseq.nextval, 'Khan', 'Silas', 17100);
insert into angajati values(idseq.nextval, 'Gonzalez', 'Maxwell', 16700);
insert into angajati values(idseq.nextval, 'Brown', 'Oscar', 15700);
insert into angajati values(idseq.nextval, 'Wong', 'Gideon', 10200);
insert into angajati values(idseq.nextval, 'Khan', 'Gideon', 19100);
insert into angajati values(idseq.nextval, 'Patel', 'Dylan', 16900);
insert into angajati values(idseq.nextval, 'Patel', 'Jasper', 16000);
insert into angajati values(idseq.nextval, 'Taylor', 'Sebastian', 19200);
insert into angajati values(idseq.nextval, 'Wong', 'Finn', 11000);
insert into angajati values(idseq.nextval, 'Kim', 'Asher', 18200);
insert into angajati values(idseq.nextval, 'Nguyen', 'Dylan', 16300);
insert into angajati values(idseq.nextval, 'Lopez', 'Asher', 18000);
insert into angajati values(idseq.nextval, 'Lee', 'Gideon', 14900);
insert into angajati values(idseq.nextval, 'Wong', 'Ethan', 14200);
insert into angajati values(idseq.nextval, 'Wong', 'Ethan', 11000);
insert into angajati values(idseq.nextval, 'Brown', 'Isaac', 14200);
insert into angajati values(idseq.nextval, 'Brown', 'Maxwell', 19500);
insert into angajati values(idseq.nextval, 'Khan', 'Oscar', 13500);
insert into angajati values(idseq.nextval, 'Brown', 'Gideon', 16800);
insert into angajati values(idseq.nextval, 'Taylor', 'Nathan', 13000);
insert into angajati values(idseq.nextval, 'Smith', 'Isaac', 20000);
insert into angajati values(idseq.nextval, 'Ali', 'Miles', 17200);
insert into angajati values(idseq.nextval, 'Singh', 'Caleb', 17900);
insert into angajati values(idseq.nextval, 'Lopez', 'Finn', 20000);
insert into angajati values(idseq.nextval, 'Kim', 'Finn', 17300);
insert into angajati values(idseq.nextval, 'Hernandez', 'Oliver', 14100);
insert into angajati values(idseq.nextval, 'Patel', 'Leo', 14700);
insert into angajati values(idseq.nextval, 'Brown', 'Caleb', 13100);

```

```

insert into antrenori values(1035);
insert into antrenori values(1036);
insert into antrenori values(1037);
insert into antrenori values(1038);
insert into antrenori values(1039);
insert into antrenori values(1040);
insert into antrenori values(1041);
insert into antrenori values(1042);
insert into antrenori values(1043);
insert into antrenori values(1044);
insert into antrenori values(1045);
insert into antrenori values(1046);
insert into antrenori values(1047);
insert into antrenori values(1048);
insert into antrenori values(1049);
insert into antrenori values(1050);

```

```

insert into preparatori_fizici values(1051);
insert into preparatori_fizici values(1052);
insert into preparatori_fizici values(1053);
insert into preparatori_fizici values(1054);
insert into preparatori_fizici values(1055);
insert into preparatori_fizici values(1056);
insert into preparatori_fizici values(1057);
insert into preparatori_fizici values(1058);
insert into preparatori_fizici values(1059);
insert into preparatori_fizici values(1060);
insert into preparatori_fizici values(1061);
insert into preparatori_fizici values(1062);
insert into preparatori_fizici values(1063);
insert into preparatori_fizici values(1064);
insert into preparatori_fizici values(1065);
insert into preparatori_fizici values(1066);

```

```

insert into nutritionisti values(1067);
insert into nutritionisti values(1068);
insert into nutritionisti values(1069);
insert into nutritionisti values(1070);
insert into nutritionisti values(1071);
insert into nutritionisti values(1072);
insert into nutritionisti values(1073);
insert into nutritionisti values(1074);
insert into nutritionisti values(1075);
insert into nutritionisti values(1076);
insert into nutritionisti values(1077);
insert into nutritionisti values(1078);
insert into nutritionisti values(1079);
insert into nutritionisti values(1080);
insert into nutritionisti values(1081);
insert into nutritionisti values(1082);

```

```

insert into locatii values(idseq.nextval, 'USA', 'New York City', 'Fifth Avenue', '742');
insert into locatii values(idseq.nextval, 'USA', 'Los Angeles', 'Hollywood Boulevard', '6801');
insert into locatii values(idseq.nextval, 'USA', 'Las Vegas', 'Las Vegas Boulevard', '3570');
insert into locatii values(idseq.nextval, 'USA', 'Chicago', 'Michigan Avenue', '875');
insert into locatii values(idseq.nextval, 'USA', 'San Francisco', 'Lombard Street', '1099');
insert into locatii values(idseq.nextval, 'USA', 'Miami', 'Ocean Drive', '100');
insert into locatii values(idseq.nextval, 'USA', 'Orlando', 'International Drive', '8000');
insert into locatii values(idseq.nextval, 'USA', 'Houston', 'NASA Road 1', '1601');
insert into locatii values(idseq.nextval, 'USA', 'Seattle', 'Pike Place Market', '85');
insert into locatii values(idseq.nextval, 'USA', 'Washington D.C.', '1600 Pennsylvania Avenue NW', '1600');
insert into locatii values(idseq.nextval, 'USA', 'Boston', 'Fenway Park', '4');
insert into locatii values(idseq.nextval, 'USA', 'Atlanta', 'Peachtree Street', '303');
insert into locatii values(idseq.nextval, 'USA', 'Dallas', 'Dealey Plaza', '411');
insert into locatii values(idseq.nextval, 'USA', 'Denver', '16th Street Mall', '1001');
insert into locatii values(idseq.nextval, 'USA', 'New Orleans', 'Bourbon Street', '500');
insert into locatii values(idseq.nextval, 'USA', 'San Diego', 'Balboa Park', '1549');

```

```

insert into arene values(idseq.nextval, 1083, 'The Thunderdome', 31000);
insert into arene values(idseq.nextval, 1084, 'The Coliseum', 21000);
insert into arene values(idseq.nextval, 1085, 'The Pit', 29000);
insert into arene values(idseq.nextval, 1086, 'The Garden', 24000);
insert into arene values(idseq.nextval, 1087, 'The Staples Center', 27000);
insert into arene values(idseq.nextval, 1088, 'The Oracle', 37000);
insert into arene values(idseq.nextval, 1089, 'The Hoop House', 31000);
insert into arene values(idseq.nextval, 1090, 'The Den', 20000);
insert into arene values(idseq.nextval, 1091, 'The Arena', 39000);
insert into arene values(idseq.nextval, 1092, 'The Thunderdome', 30000);
insert into arene values(idseq.nextval, 1093, 'The Dome', 37000);
insert into arene values(idseq.nextval, 1094, 'The Palace', 31000);
insert into arene values(idseq.nextval, 1095, 'The Madhouse', 30000);
insert into arene values(idseq.nextval, 1096, 'The Pavilion', 36000);
insert into arene values(idseq.nextval, 1097, 'The Buzzer Beater', 31000);

```

insert into arene values(idseq.nextval, 1098, 'The Swish Center', 39000);

insert into echipe values(idseq.nextval, 1099, 1035, 1051,1067, 'Lightning Bolts', 2006);  
insert into echipe values(idseq.nextval, 1100, 1036, 1052,1068, 'Thunderbirds', 1973);  
insert into echipe values(idseq.nextval, 1101, 1037, 1053,1069, 'Wildcats', 2008);  
insert into echipe values(idseq.nextval, 1102, 1038, 1054,1070, 'Heatwave', 2001);  
insert into echipe values(idseq.nextval, 1103, 1039, 1055,1071, 'Hurricanes', 1985);  
insert into echipe values(idseq.nextval, 1104, 1040, 1056,1072, 'Jaguars', 1975);  
insert into echipe values(idseq.nextval, 1105, 1041, 1057,1073, 'Patriots', 2007);  
insert into echipe values(idseq.nextval, 1106, 1042, 1058,1074, 'Titans', 1993);  
insert into echipe values(idseq.nextval, 1107, 1043, 1059,1075, 'Vikings', 2004);  
insert into echipe values(idseq.nextval, 1108, 1044, 1060,1076, 'Dragons', 2000);  
insert into echipe values(idseq.nextval, 1109, 1045, 1061,1077, 'Raptors', 1990);  
insert into echipe values(idseq.nextval, 1110, 1046, 1062,1078, 'Warriors', 2009);  
insert into echipe values(idseq.nextval, 1111, 1047, 1063,1079, 'Hornets', 1992);  
insert into echipe values(idseq.nextval, 1112, 1048, 1064,1080, 'Sharks', 1988);  
insert into echipe values(idseq.nextval, 1113, 1049, 1065,1081, 'Lions', 2003);  
insert into echipe values(idseq.nextval, 1114, 1050, 1066,1082, 'Knights', 1974);

insert into jucatori values(idseq.nextval, 1115, 'Lopez', 'Maxwell', 1.84, 31000);  
insert into jucatori values(idseq.nextval, 1115, 'Kim', 'Maxwell', 2.2, 48000);  
insert into jucatori values(idseq.nextval, 1115, 'Patel', 'Sebastian', 1.98, 49000);  
insert into jucatori values(idseq.nextval, 1115, 'Hernandez', 'Ethan', 1.82, 44000);  
insert into jucatori values(idseq.nextval, 1115, 'Brown', 'Asher', 1.9, 38000);  
insert into jucatori values(idseq.nextval, 1116, 'Garcia', 'Sebastian', 2.0, 30000);  
insert into jucatori values(idseq.nextval, 1116, 'Lee', 'Gideon', 1.81, 32000);  
insert into jucatori values(idseq.nextval, 1116, 'Nguyen', 'Oscar', 1.86, 38000);  
insert into jucatori values(idseq.nextval, 1116, 'Wilson', 'Ethan', 2.04, 44000);  
insert into jucatori values(idseq.nextval, 1116, 'Davis', 'Silas', 1.83, 34000);  
insert into jucatori values(idseq.nextval, 1117, 'Ali', 'Wyatt', 1.83, 41000);  
insert into jucatori values(idseq.nextval, 1117, 'Thomas', 'Sebastian', 2.12, 47000);  
insert into jucatori values(idseq.nextval, 1117, 'Singh', 'Wyatt', 2.12, 41000);  
insert into jucatori values(idseq.nextval, 1117, 'Khan', 'Ezra', 2.15, 34000);  
insert into jucatori values(idseq.nextval, 1117, 'Ali', 'Gabriel', 1.88, 40000);  
insert into jucatori values(idseq.nextval, 1118, 'Brown', 'Gabriel', 1.85, 43000);  
insert into jucatori values(idseq.nextval, 1118, 'Kim', 'Harrison', 1.87, 31000);  
insert into jucatori values(idseq.nextval, 1118, 'Anderson', 'Oscar', 1.96, 39000);  
insert into jucatori values(idseq.nextval, 1118, 'Gonzalez', 'Gabriel', 1.87, 47000);  
insert into jucatori values(idseq.nextval, 1118, 'Ali', 'Ezra', 2.07, 42000);  
insert into jucatori values(idseq.nextval, 1119, 'Lopez', 'Jasper', 1.93, 30000);  
insert into jucatori values(idseq.nextval, 1119, 'Smith', 'Leo', 2.04, 39000);  
insert into jucatori values(idseq.nextval, 1119, 'Khan', 'Finn', 1.83, 38000);  
insert into jucatori values(idseq.nextval, 1119, 'Anderson', 'Sebastian', 1.95, 40000);  
insert into jucatori values(idseq.nextval, 1119, 'Anderson', 'Leo', 1.99, 31000);  
insert into jucatori values(idseq.nextval, 1120, 'Brown', 'Miles', 1.81, 46000);  
insert into jucatori values(idseq.nextval, 1120, 'Taylor', 'Miles', 1.85, 48000);  
insert into jucatori values(idseq.nextval, 1120, 'Smith', 'Oliver', 2.11, 49000);  
insert into jucatori values(idseq.nextval, 1120, 'Lee', 'Jasper', 1.91, 39000);  
insert into jucatori values(idseq.nextval, 1120, 'Ali', 'Oscar', 1.96, 36000);  
insert into jucatori values(idseq.nextval, 1121, 'Ali', 'Oscar', 2.06, 43000);  
insert into jucatori values(idseq.nextval, 1121, 'Khan', 'Dylan', 2.02, 39000);  
insert into jucatori values(idseq.nextval, 1121, 'Hernandez', 'Wyatt', 1.83, 38000);  
insert into jucatori values(idseq.nextval, 1121, 'Hernandez', 'Harrison', 1.86, 50000);  
insert into jucatori values(idseq.nextval, 1121, 'Brown', 'Silas', 2.03, 31000);  
insert into jucatori values(idseq.nextval, 1122, 'Hernandez', 'Sebastian', 2.19, 46000);  
insert into jucatori values(idseq.nextval, 1122, 'Lopez', 'Harrison', 1.93, 42000);  
insert into jucatori values(idseq.nextval, 1122, 'Davis', 'Sebastian', 1.84, 46000);  
insert into jucatori values(idseq.nextval, 1122, 'Hernandez', 'Dylan', 2.17, 35000);  
insert into jucatori values(idseq.nextval, 1122, 'Gonzalez', 'Wyatt', 1.96, 36000);  
insert into jucatori values(idseq.nextval, 1123, 'Singh', 'Maxwell', 2.05, 45000);  
insert into jucatori values(idseq.nextval, 1123, 'Gonzalez', 'Asher', 2.1, 50000);  
insert into jucatori values(idseq.nextval, 1123, 'Taylor', 'Miles', 1.93, 32000);  
insert into jucatori values(idseq.nextval, 1123, 'Davis', 'Dylan', 2.03, 42000);  
insert into jucatori values(idseq.nextval, 1123, 'Thomas', 'Maxwell', 2.17, 33000);  
insert into jucatori values(idseq.nextval, 1124, 'Thomas', 'Oliver', 2.05, 37000);  
insert into jucatori values(idseq.nextval, 1124, 'Lee', 'Maxwell', 1.82, 43000);  
insert into jucatori values(idseq.nextval, 1124, 'Chen', 'Wyatt', 1.86, 38000);

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insert into jucatori values(idseq.nextval, 1124, 'Wong', 'Ethan', 1.94, 41000);
insert into jucatori values(idseq.nextval, 1124, 'Garcia', 'Dylan', 2.15, 42000);
insert into jucatori values(idseq.nextval, 1125, 'Brown', 'Asher', 2.17, 44000);
insert into jucatori values(idseq.nextval, 1125, 'Taylor', 'Caleb', 1.97, 32000);
insert into jucatori values(idseq.nextval, 1125, 'Thomas', 'Dylan', 1.92, 34000);
insert into jucatori values(idseq.nextval, 1125, 'Chen', 'Oscar', 1.95, 34000);
insert into jucatori values(idseq.nextval, 1125, 'Wilson', 'Nathan', 1.93, 39000);
insert into jucatori values(idseq.nextval, 1126, 'Wong', 'Isaac', 1.9, 34000);
insert into jucatori values(idseq.nextval, 1126, 'Gonzalez', 'Oliver', 2.16, 46000);
insert into jucatori values(idseq.nextval, 1126, 'Gonzalez', 'Sebastian', 1.85, 37000);
insert into jucatori values(idseq.nextval, 1126, 'Anderson', 'Maxwell', 1.84, 35000);
insert into jucatori values(idseq.nextval, 1126, 'Garcia', 'Ezra', 2.04, 47000);
insert into jucatori values(idseq.nextval, 1127, 'Patel', 'Isaac', 2.11, 34000);
insert into jucatori values(idseq.nextval, 1127, 'Wilson', 'Miles', 1.86, 42000);
insert into jucatori values(idseq.nextval, 1127, 'Garcia', 'Gideon', 2.06, 36000);
insert into jucatori values(idseq.nextval, 1127, 'Wilson', 'Leo', 1.85, 49000);
insert into jucatori values(idseq.nextval, 1127, 'Wong', 'Dylan', 2.02, 34000);
insert into jucatori values(idseq.nextval, 1128, 'Hernandez', 'Finn', 1.88, 47000);
insert into jucatori values(idseq.nextval, 1128, 'Ali', 'Finn', 2.0, 43000);
insert into jucatori values(idseq.nextval, 1128, 'Hernandez', 'Ethan', 1.95, 45000);
insert into jucatori values(idseq.nextval, 1128, 'Kim', 'Gideon', 1.89, 45000);
insert into jucatori values(idseq.nextval, 1128, 'Wong', 'Gideon', 2.18, 32000);
insert into jucatori values(idseq.nextval, 1129, 'Brown', 'Oscar', 1.98, 38000);
insert into jucatori values(idseq.nextval, 1129, 'Singh', 'Jasper', 2.19, 46000);
insert into jucatori values(idseq.nextval, 1129, 'Smith', 'Finn', 2.18, 44000);
insert into jucatori values(idseq.nextval, 1129, 'Lopez', 'Ezra', 1.85, 30000);
insert into jucatori values(idseq.nextval, 1129, 'Ali', 'Sebastian', 2.11, 36000);
insert into jucatori values(idseq.nextval, 1130, 'Taylor', 'Gideon', 1.93, 48000);
insert into jucatori values(idseq.nextval, 1130, 'Gonzalez', 'Leo', 2.19, 32000);
insert into jucatori values(idseq.nextval, 1130, 'Davis', 'Silas', 1.96, 45000);
insert into jucatori values(idseq.nextval, 1130, 'Wong', 'Gideon', 2.11, 43000);
insert into jucatori values(idseq.nextval, 1130, 'Lee', 'Wyatt', 1.83, 40000);

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insert into echipe_medicale values(idseq.nextval);
insert into echipe_medicale values(idseq.nextval);
insert into echipe_medicale values(idseq.nextval);
insert into echipe_medicale values(idseq.nextval);
insert into echipe_medicale values(idseq.nextval);

```

```

insert into meciuri values(idseq.nextval, 1005, 1115, 1130, 1211, 97, 109);
insert into meciuri values(idseq.nextval, 1005, 1116, 1129, 1211, 119, 97);
insert into meciuri values(idseq.nextval, 1005, 1117, 1128, 1215, 101, 118);
insert into meciuri values(idseq.nextval, 1005, 1118, 1127, 1211, 107, 64);
insert into meciuri values(idseq.nextval, 1005, 1119, 1126, 1212, 73, 91);
insert into meciuri values(idseq.nextval, 1005, 1120, 1125, 1213, 105, 108);
insert into meciuri values(idseq.nextval, 1005, 1121, 1124, 1213, 109, 53);
insert into meciuri values(idseq.nextval, 1005, 1122, 1123, 1214, 117, 83);
insert into meciuri values(idseq.nextval, 1006, 1115, 1129, 1215, 87, 115);
insert into meciuri values(idseq.nextval, 1006, 1130, 1128, 1211, 92, 107);
insert into meciuri values(idseq.nextval, 1006, 1116, 1127, 1212, 94, 117);
insert into meciuri values(idseq.nextval, 1006, 1117, 1126, 1213, 88, 87);
insert into meciuri values(idseq.nextval, 1006, 1118, 1125, 1212, 60, 119);
insert into meciuri values(idseq.nextval, 1006, 1119, 1124, 1213, 92, 81);
insert into meciuri values(idseq.nextval, 1006, 1120, 1123, 1213, 72, 111);
insert into meciuri values(idseq.nextval, 1006, 1121, 1122, 1212, 115, 78);
insert into meciuri values(idseq.nextval, 1007, 1115, 1128, 1215, 67, 119);
insert into meciuri values(idseq.nextval, 1007, 1129, 1127, 1212, 101, 68);
insert into meciuri values(idseq.nextval, 1007, 1130, 1126, 1212, 119, 58);
insert into meciuri values(idseq.nextval, 1007, 1116, 1125, 1214, 102, 90);
insert into meciuri values(idseq.nextval, 1007, 1117, 1124, 1211, 58, 54);
insert into meciuri values(idseq.nextval, 1007, 1118, 1123, 1212, 67, 86);
insert into meciuri values(idseq.nextval, 1007, 1119, 1122, 1213, 50, 93);
insert into meciuri values(idseq.nextval, 1007, 1120, 1121, 1212, 85, 95);
insert into meciuri values(idseq.nextval, 1008, 1115, 1127, 1211, 79, 113);

```

```

insert into meciuri values(idseq.nextval, 1008, 1128, 1126, 1212, 56, 82);
insert into meciuri values(idseq.nextval, 1008, 1129, 1125, 1215, 58, 105);
insert into meciuri values(idseq.nextval, 1008, 1130, 1124, 1215, 91, 115);
insert into meciuri values(idseq.nextval, 1008, 1116, 1123, 1213, 117, 77);
insert into meciuri values(idseq.nextval, 1008, 1117, 1122, 1211, 68, 66);
insert into meciuri values(idseq.nextval, 1008, 1118, 1121, 1213, 67, 114);
insert into meciuri values(idseq.nextval, 1008, 1119, 1120, 1215, 111, 92);
insert into meciuri values(idseq.nextval, 1009, 1115, 1126, 1215, 69, 60);
insert into meciuri values(idseq.nextval, 1009, 1127, 1125, 1214, 110, 55);
insert into meciuri values(idseq.nextval, 1009, 1128, 1124, 1214, 95, 56);
insert into meciuri values(idseq.nextval, 1009, 1129, 1123, 1212, 80, 102);
insert into meciuri values(idseq.nextval, 1009, 1130, 1122, 1212, 84, 86);
insert into meciuri values(idseq.nextval, 1009, 1116, 1121, 1212, 116, 76);
insert into meciuri values(idseq.nextval, 1009, 1117, 1120, 1214, 59, 51);
insert into meciuri values(idseq.nextval, 1009, 1118, 1119, 1212, 85, 58);
insert into meciuri values(idseq.nextval, 1010, 1115, 1125, 1213, 105, 118);
insert into meciuri values(idseq.nextval, 1010, 1126, 1124, 1215, 59, 78);
insert into meciuri values(idseq.nextval, 1010, 1127, 1123, 1214, 93, 120);
insert into meciuri values(idseq.nextval, 1010, 1128, 1122, 1215, 115, 50);
insert into meciuri values(idseq.nextval, 1010, 1129, 1121, 1212, 61, 119);
insert into meciuri values(idseq.nextval, 1010, 1130, 1120, 1214, 59, 63);
insert into meciuri values(idseq.nextval, 1010, 1116, 1119, 1212, 73, 60);
insert into meciuri values(idseq.nextval, 1010, 1117, 1118, 1212, 67, 81);
insert into meciuri values(idseq.nextval, 1011, 1115, 1124, 1212, 70, 53);
insert into meciuri values(idseq.nextval, 1011, 1125, 1123, 1213, 75, 76);
insert into meciuri values(idseq.nextval, 1011, 1126, 1122, 1215, 65, 110);
insert into meciuri values(idseq.nextval, 1011, 1127, 1121, 1213, 99, 89);
insert into meciuri values(idseq.nextval, 1011, 1128, 1120, 1211, 110, 67);
insert into meciuri values(idseq.nextval, 1011, 1129, 1119, 1214, 101, 62);
insert into meciuri values(idseq.nextval, 1011, 1130, 1118, 1211, 64, 105);
insert into meciuri values(idseq.nextval, 1011, 1116, 1117, 1213, 116, 120);
insert into meciuri values(idseq.nextval, 1012, 1115, 1123, 1212, 72, 51);
insert into meciuri values(idseq.nextval, 1012, 1124, 1122, 1215, 93, 61);
insert into meciuri values(idseq.nextval, 1012, 1125, 1121, 1215, 78, 64);
insert into meciuri values(idseq.nextval, 1012, 1126, 1120, 1214, 99, 91);
insert into meciuri values(idseq.nextval, 1012, 1127, 1119, 1212, 92, 109);
insert into meciuri values(idseq.nextval, 1012, 1128, 1118, 1215, 92, 52);
insert into meciuri values(idseq.nextval, 1012, 1129, 1117, 1212, 64, 105);
insert into meciuri values(idseq.nextval, 1012, 1130, 1116, 1211, 93, 68);
insert into meciuri values(idseq.nextval, 1013, 1115, 1122, 1213, 103, 83);
insert into meciuri values(idseq.nextval, 1013, 1123, 1121, 1211, 90, 89);
insert into meciuri values(idseq.nextval, 1013, 1124, 1120, 1212, 51, 116);
insert into meciuri values(idseq.nextval, 1013, 1125, 1119, 1211, 103, 68);
insert into meciuri values(idseq.nextval, 1013, 1126, 1118, 1211, 103, 115);
insert into meciuri values(idseq.nextval, 1013, 1127, 1117, 1214, 87, 107);
insert into meciuri values(idseq.nextval, 1013, 1128, 1116, 1212, 74, 86);
insert into meciuri values(idseq.nextval, 1013, 1129, 1130, 1214, 66, 109);
insert into meciuri values(idseq.nextval, 1014, 1115, 1121, 1213, 90, 89);
insert into meciuri values(idseq.nextval, 1014, 1122, 1120, 1215, 80, 116);
insert into meciuri values(idseq.nextval, 1014, 1123, 1119, 1213, 107, 66);
insert into meciuri values(idseq.nextval, 1014, 1124, 1118, 1215, 63, 110);
insert into meciuri values(idseq.nextval, 1014, 1125, 1117, 1211, 111, 76);
insert into meciuri values(idseq.nextval, 1014, 1126, 1116, 1213, 59, 90);
insert into meciuri values(idseq.nextval, 1014, 1127, 1130, 1212, 71, 90);
insert into meciuri values(idseq.nextval, 1014, 1128, 1129, 1212, 80, 96);
insert into meciuri values(idseq.nextval, 1015, 1115, 1120, 1215, 119, 98);
insert into meciuri values(idseq.nextval, 1015, 1121, 1119, 1215, 77, 108);
insert into meciuri values(idseq.nextval, 1015, 1122, 1118, 1214, 64, 110);
insert into meciuri values(idseq.nextval, 1015, 1123, 1117, 1212, 82, 78);
insert into meciuri values(idseq.nextval, 1015, 1124, 1116, 1212, 65, 75);
insert into meciuri values(idseq.nextval, 1015, 1125, 1130, 1211, 80, 102);
insert into meciuri values(idseq.nextval, 1015, 1126, 1129, 1215, 73, 91);
insert into meciuri values(idseq.nextval, 1015, 1127, 1128, 1213, 119, 96);
insert into meciuri values(idseq.nextval, 1016, 1115, 1119, 1215, 80, 69);
insert into meciuri values(idseq.nextval, 1016, 1120, 1118, 1213, 91, 106);
insert into meciuri values(idseq.nextval, 1016, 1121, 1117, 1211, 114, 101);
insert into meciuri values(idseq.nextval, 1016, 1122, 1116, 1212, 78, 90);
insert into meciuri values(idseq.nextval, 1016, 1123, 1130, 1215, 108, 69);
insert into meciuri values(idseq.nextval, 1016, 1124, 1129, 1215, 67, 86);
insert into meciuri values(idseq.nextval, 1016, 1125, 1128, 1214, 120, 109);

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```

insert into meciuri values(idseq.nextval, 1016, 1126, 1127, 1212, 82, 117);
insert into meciuri values(idseq.nextval, 1017, 1115, 1118, 1215, 91, 77);
insert into meciuri values(idseq.nextval, 1017, 1119, 1117, 1212, 88, 95);
insert into meciuri values(idseq.nextval, 1017, 1120, 1116, 1211, 68, 50);
insert into meciuri values(idseq.nextval, 1017, 1121, 1130, 1214, 86, 83);
insert into meciuri values(idseq.nextval, 1017, 1122, 1129, 1215, 61, 59);
insert into meciuri values(idseq.nextval, 1017, 1123, 1128, 1214, 58, 94);
insert into meciuri values(idseq.nextval, 1017, 1124, 1127, 1212, 55, 70);
insert into meciuri values(idseq.nextval, 1017, 1125, 1126, 1214, 57, 94);
insert into meciuri values(idseq.nextval, 1018, 1115, 1117, 1211, 62, 104);
insert into meciuri values(idseq.nextval, 1018, 1118, 1116, 1214, 106, 71);
insert into meciuri values(idseq.nextval, 1018, 1119, 1130, 1212, 59, 89);
insert into meciuri values(idseq.nextval, 1018, 1120, 1129, 1215, 98, 106);
insert into meciuri values(idseq.nextval, 1018, 1121, 1128, 1212, 101, 92);
insert into meciuri values(idseq.nextval, 1018, 1122, 1127, 1212, 67, 107);
insert into meciuri values(idseq.nextval, 1018, 1123, 1126, 1212, 114, 106);
insert into meciuri values(idseq.nextval, 1018, 1124, 1125, 1214, 82, 61);
insert into meciuri values(idseq.nextval, 1019, 1116, 1115, 1212, 90, 103);
insert into meciuri values(idseq.nextval, 1019, 1130, 1117, 1214, 85, 103);
insert into meciuri values(idseq.nextval, 1019, 1129, 1118, 1213, 62, 71);
insert into meciuri values(idseq.nextval, 1019, 1128, 1119, 1211, 64, 93);
insert into meciuri values(idseq.nextval, 1019, 1127, 1120, 1215, 90, 120);
insert into meciuri values(idseq.nextval, 1019, 1126, 1121, 1211, 64, 69);
insert into meciuri values(idseq.nextval, 1019, 1125, 1122, 1215, 108, 102);
insert into meciuri values(idseq.nextval, 1019, 1124, 1123, 1215, 50, 96);
insert into meciuri values(idseq.nextval, 1020, 1130, 1115, 1215, 88, 100);
insert into meciuri values(idseq.nextval, 1020, 1129, 1116, 1214, 88, 94);
insert into meciuri values(idseq.nextval, 1020, 1128, 1117, 1213, 78, 105);
insert into meciuri values(idseq.nextval, 1020, 1127, 1118, 1211, 67, 50);
insert into meciuri values(idseq.nextval, 1020, 1126, 1119, 1213, 71, 50);
insert into meciuri values(idseq.nextval, 1020, 1125, 1120, 1215, 101, 117);
insert into meciuri values(idseq.nextval, 1020, 1124, 1121, 1214, 69, 61);
insert into meciuri values(idseq.nextval, 1020, 1123, 1122, 1214, 61, 89);
insert into meciuri values(idseq.nextval, 1021, 1129, 1115, 1215, 118, 92);
insert into meciuri values(idseq.nextval, 1021, 1128, 1130, 1211, 67, 104);
insert into meciuri values(idseq.nextval, 1021, 1127, 1116, 1215, 57, 92);
insert into meciuri values(idseq.nextval, 1021, 1126, 1117, 1214, 58, 74);
insert into meciuri values(idseq.nextval, 1021, 1125, 1118, 1214, 74, 81);
insert into meciuri values(idseq.nextval, 1021, 1124, 1119, 1214, 84, 69);
insert into meciuri values(idseq.nextval, 1021, 1123, 1120, 1213, 100, 69);
insert into meciuri values(idseq.nextval, 1021, 1122, 1121, 1214, 106, 66);
insert into meciuri values(idseq.nextval, 1022, 1128, 1115, 1212, 118, 58);
insert into meciuri values(idseq.nextval, 1022, 1127, 1129, 1212, 51, 119);
insert into meciuri values(idseq.nextval, 1022, 1126, 1130, 1213, 77, 88);
insert into meciuri values(idseq.nextval, 1022, 1125, 1116, 1212, 78, 72);
insert into meciuri values(idseq.nextval, 1022, 1124, 1117, 1215, 120, 105);
insert into meciuri values(idseq.nextval, 1022, 1123, 1118, 1213, 111, 104);
insert into meciuri values(idseq.nextval, 1022, 1122, 1119, 1215, 60, 74);
insert into meciuri values(idseq.nextval, 1022, 1121, 1120, 1212, 87, 91);
insert into meciuri values(idseq.nextval, 1023, 1127, 1115, 1215, 96, 90);
insert into meciuri values(idseq.nextval, 1023, 1126, 1128, 1212, 64, 103);
insert into meciuri values(idseq.nextval, 1023, 1125, 1129, 1211, 90, 116);
insert into meciuri values(idseq.nextval, 1023, 1124, 1130, 1212, 108, 60);
insert into meciuri values(idseq.nextval, 1023, 1123, 1116, 1211, 58, 107);
insert into meciuri values(idseq.nextval, 1023, 1122, 1117, 1215, 96, 93);
insert into meciuri values(idseq.nextval, 1023, 1121, 1118, 1212, 82, 51);
insert into meciuri values(idseq.nextval, 1023, 1120, 1119, 1212, 91, 99);
insert into meciuri values(idseq.nextval, 1024, 1126, 1115, 1213, 103, 65);
insert into meciuri values(idseq.nextval, 1024, 1125, 1127, 1214, 107, 78);
insert into meciuri values(idseq.nextval, 1024, 1124, 1128, 1215, 85, 56);
insert into meciuri values(idseq.nextval, 1024, 1123, 1129, 1215, 67, 108);
insert into meciuri values(idseq.nextval, 1024, 1122, 1130, 1215, 103, 74);
insert into meciuri values(idseq.nextval, 1024, 1121, 1116, 1212, 70, 93);
insert into meciuri values(idseq.nextval, 1024, 1120, 1117, 1213, 104, 61);
insert into meciuri values(idseq.nextval, 1024, 1119, 1118, 1214, 93, 114);
insert into meciuri values(idseq.nextval, 1025, 1125, 1115, 1211, 51, 71);
insert into meciuri values(idseq.nextval, 1025, 1124, 1126, 1214, 70, 93);
insert into meciuri values(idseq.nextval, 1025, 1123, 1127, 1214, 118, 108);
insert into meciuri values(idseq.nextval, 1025, 1122, 1128, 1215, 65, 99);
insert into meciuri values(idseq.nextval, 1025, 1121, 1129, 1212, 112, 86);

```

```

insert into meciuri values(idseq.nextval, 1025, 1120, 1130, 1213, 111, 62);
insert into meciuri values(idseq.nextval, 1025, 1119, 1116, 1215, 112, 103);
insert into meciuri values(idseq.nextval, 1025, 1118, 1117, 1211, 58, 107);
insert into meciuri values(idseq.nextval, 1026, 1124, 1115, 1213, 111, 58);
insert into meciuri values(idseq.nextval, 1026, 1123, 1125, 1212, 59, 90);
insert into meciuri values(idseq.nextval, 1026, 1122, 1126, 1213, 61, 83);
insert into meciuri values(idseq.nextval, 1026, 1121, 1127, 1213, 104, 56);
insert into meciuri values(idseq.nextval, 1026, 1120, 1128, 1212, 89, 83);
insert into meciuri values(idseq.nextval, 1026, 1119, 1129, 1212, 66, 60);
insert into meciuri values(idseq.nextval, 1026, 1118, 1130, 1212, 89, 95);
insert into meciuri values(idseq.nextval, 1026, 1117, 1116, 1213, 72, 55);
insert into meciuri values(idseq.nextval, 1027, 1123, 1115, 1215, 95, 72);
insert into meciuri values(idseq.nextval, 1027, 1122, 1124, 1212, 110, 101);
insert into meciuri values(idseq.nextval, 1027, 1121, 1125, 1215, 103, 84);
insert into meciuri values(idseq.nextval, 1027, 1120, 1126, 1214, 117, 108);
insert into meciuri values(idseq.nextval, 1027, 1119, 1127, 1212, 91, 64);
insert into meciuri values(idseq.nextval, 1027, 1118, 1128, 1215, 118, 88);
insert into meciuri values(idseq.nextval, 1027, 1117, 1129, 1215, 61, 81);
insert into meciuri values(idseq.nextval, 1027, 1116, 1130, 1211, 53, 58);
insert into meciuri values(idseq.nextval, 1028, 1122, 1115, 1213, 72, 85);
insert into meciuri values(idseq.nextval, 1028, 1121, 1123, 1212, 51, 60);
insert into meciuri values(idseq.nextval, 1028, 1120, 1124, 1213, 87, 97);
insert into meciuri values(idseq.nextval, 1028, 1119, 1125, 1215, 116, 115);
insert into meciuri values(idseq.nextval, 1028, 1118, 1126, 1211, 61, 88);
insert into meciuri values(idseq.nextval, 1028, 1117, 1127, 1212, 52, 96);
insert into meciuri values(idseq.nextval, 1028, 1116, 1128, 1212, 97, 91);
insert into meciuri values(idseq.nextval, 1028, 1130, 1129, 1215, 91, 74);
insert into meciuri values(idseq.nextval, 1029, 1121, 1115, 1211, 50, 69);
insert into meciuri values(idseq.nextval, 1029, 1120, 1122, 1211, 97, 69);
insert into meciuri values(idseq.nextval, 1029, 1119, 1123, 1215, 112, 105);
insert into meciuri values(idseq.nextval, 1029, 1118, 1124, 1212, 75, 78);
insert into meciuri values(idseq.nextval, 1029, 1117, 1125, 1215, 60, 106);
insert into meciuri values(idseq.nextval, 1029, 1116, 1126, 1212, 59, 120);
insert into meciuri values(idseq.nextval, 1029, 1130, 1127, 1215, 78, 115);
insert into meciuri values(idseq.nextval, 1029, 1129, 1128, 1211, 56, 57);
insert into meciuri values(idseq.nextval, 1030, 1120, 1115, 1211, 86, 110);
insert into meciuri values(idseq.nextval, 1030, 1119, 1121, 1215, 99, 75);
insert into meciuri values(idseq.nextval, 1030, 1118, 1122, 1213, 62, 102);
insert into meciuri values(idseq.nextval, 1030, 1117, 1123, 1211, 63, 77);
insert into meciuri values(idseq.nextval, 1030, 1116, 1124, 1214, 103, 57);
insert into meciuri values(idseq.nextval, 1030, 1130, 1125, 1213, 85, 50);
insert into meciuri values(idseq.nextval, 1030, 1129, 1126, 1215, 53, 115);
insert into meciuri values(idseq.nextval, 1030, 1128, 1127, 1212, 106, 67);
insert into meciuri values(idseq.nextval, 1031, 1119, 1115, 1213, 57, 111);
insert into meciuri values(idseq.nextval, 1031, 1118, 1120, 1214, 88, 82);
insert into meciuri values(idseq.nextval, 1031, 1117, 1121, 1211, 83, 54);
insert into meciuri values(idseq.nextval, 1031, 1116, 1122, 1212, 62, 58);
insert into meciuri values(idseq.nextval, 1031, 1130, 1123, 1211, 55, 72);
insert into meciuri values(idseq.nextval, 1031, 1129, 1124, 1214, 98, 116);
insert into meciuri values(idseq.nextval, 1031, 1128, 1125, 1211, 82, 94);
insert into meciuri values(idseq.nextval, 1031, 1127, 1126, 1214, 87, 101);
insert into meciuri values(idseq.nextval, 1032, 1118, 1115, 1214, 66, 83);
insert into meciuri values(idseq.nextval, 1032, 1117, 1119, 1211, 100, 107);
insert into meciuri values(idseq.nextval, 1032, 1116, 1120, 1212, 77, 59);
insert into meciuri values(idseq.nextval, 1032, 1130, 1121, 1214, 61, 84);
insert into meciuri values(idseq.nextval, 1032, 1129, 1122, 1212, 75, 50);
insert into meciuri values(idseq.nextval, 1032, 1128, 1123, 1212, 56, 82);
insert into meciuri values(idseq.nextval, 1032, 1127, 1124, 1213, 89, 78);
insert into meciuri values(idseq.nextval, 1032, 1126, 1125, 1211, 57, 78);
insert into meciuri values(idseq.nextval, 1033, 1117, 1115, 1212, 85, 79);
insert into meciuri values(idseq.nextval, 1033, 1116, 1118, 1214, 92, 73);
insert into meciuri values(idseq.nextval, 1033, 1130, 1119, 1214, 107, 101);
insert into meciuri values(idseq.nextval, 1033, 1129, 1120, 1211, 54, 66);
insert into meciuri values(idseq.nextval, 1033, 1128, 1121, 1213, 76, 111);
insert into meciuri values(idseq.nextval, 1033, 1127, 1122, 1213, 90, 89);
insert into meciuri values(idseq.nextval, 1033, 1126, 1123, 1213, 72, 116);
insert into meciuri values(idseq.nextval, 1033, 1125, 1124, 1211, 50, 103);
insert into meciuri values(idseq.nextval, 1034, 1116, 1115, 1213, 60, 82);
insert into meciuri values(idseq.nextval, 1034, 1130, 1117, 1214, 85, 52);
insert into meciuri values(idseq.nextval, 1034, 1129, 1118, 1211, 74, 80);

```

```

insert into meciuri values(idseq.nextval, 1034, 1128, 1119, 1215, 69, 73);
insert into meciuri values(idseq.nextval, 1034, 1127, 1120, 1215, 84, 82);
insert into meciuri values(idseq.nextval, 1034, 1126, 1121, 1213, 85, 77);
insert into meciuri values(idseq.nextval, 1034, 1125, 1122, 1212, 117, 80);
insert into meciuri values(idseq.nextval, 1034, 1124, 1123, 1213, 108, 85);

```

```

insert into arbitrii values(idseq.nextval, 'Lee', 'Sebastian', to_date('03-05-1970', 'DD-MM-YYYY'));
insert into arbitrii values(idseq.nextval, 'Brown', 'Sebastian', to_date('25-12-1999', 'DD-MM-YYYY'));
insert into arbitrii values(idseq.nextval, 'Wilson', 'Oscar', to_date('20-01-1976', 'DD-MM-YYYY'));
insert into arbitrii values(idseq.nextval, 'Chen', 'Isaac', to_date('07-07-1991', 'DD-MM-YYYY'));
insert into arbitrii values(idseq.nextval, 'Chen', 'Jasper', to_date('27-02-1991', 'DD-MM-YYYY'));

```

```

insert into comentatori values(idseq.nextval, 'Lopez', 'Dylan');
insert into comentatori values(idseq.nextval, 'Chen', 'Harrison');
insert into comentatori values(idseq.nextval, 'Nguyen', 'Ezra');
insert into comentatori values(idseq.nextval, 'Patel', 'Wyatt');
insert into comentatori values(idseq.nextval, 'Thomas', 'Nathan');

```

```

insert into statistici values(idseq.nextval, 1216, 1131, 48, 24, 19, 5, 3, 11, 0, 20, 7, 3);
insert into statistici values(idseq.nextval, 1216, 1132, 36, 25, 13, 15, 11, 0, 0, 15, 8, 4);
insert into statistici values(idseq.nextval, 1216, 1133, 39, 13, 9, 0, 0, 0, 0, 7, 9, 3);
insert into statistici values(idseq.nextval, 1216, 1134, 48, 10, 6, 11, 6, 8, 0, 14, 0, 3);
insert into statistici values(idseq.nextval, 1216, 1135, 23, 2, 2, 19, 15, 10, 8, 9, 7, 1);
insert into statistici values(idseq.nextval, 1216, 1206, 45, 14, 6, 8, 6, 13, 11, 12, 8, 0);
insert into statistici values(idseq.nextval, 1216, 1207, 32, 27, 9, 17, 15, 6, 6, 25, 3, 0);
insert into statistici values(idseq.nextval, 1216, 1208, 23, 4, 0, 8, 7, 9, 1, 11, 6, 2);
insert into statistici values(idseq.nextval, 1216, 1209, 36, 11, 11, 11, 0, 4, 2, 13, 4, 4);
insert into statistici values(idseq.nextval, 1216, 1210, 35, 16, 4, 1, 0, 9, 6, 17, 6, 4);

```

```

insert into premii values(idseq.nextval, 'Most Valuable Player (MVP)');
insert into premii values(idseq.nextval, 'Rookie of the Year');
insert into premii values(idseq.nextval, 'Defensive Player of the Year');
insert into premii values(idseq.nextval, 'Sixth Man of the Year');
insert into premii values(idseq.nextval, 'Most Improved Player');

```

```

insert into participari values(1000, 1115);
insert into participari values(1000, 1116);
insert into participari values(1000, 1117);
insert into participari values(1000, 1118);
insert into participari values(1000, 1119);
insert into participari values(1000, 1120);
insert into participari values(1000, 1121);
insert into participari values(1000, 1122);
insert into participari values(1000, 1123);
insert into participari values(1000, 1124);
insert into participari values(1000, 1125);
insert into participari values(1000, 1126);
insert into participari values(1000, 1127);
insert into participari values(1000, 1128);
insert into participari values(1000, 1129);
insert into participari values(1000, 1130);

```

```

insert into arbitraje values(1216, 1459);
insert into arbitraje values(1216, 1460);
insert into arbitraje values(1216, 1458);
insert into arbitraje values(1217, 1459);
insert into arbitraje values(1217, 1458);
insert into arbitraje values(1217, 1457);
insert into arbitraje values(1218, 1457);

```



[illegible]

[illegible]

[illegible]

```

insert into arbitraje values(1288, 1457);
insert into arbitraje values(1288, 1458);
insert into arbitraje values(1289, 1460);
insert into arbitraje values(1289, 1456);
insert into arbitraje values(1289, 1457);
insert into arbitraje values(1290, 1459);
insert into arbitraje values(1290, 1456);
insert into arbitraje values(1290, 1460);
insert into arbitraje values(1291, 1459);
insert into arbitraje values(1291, 1457);
insert into arbitraje values(1291, 1460);
insert into arbitraje values(1292, 1458);
insert into arbitraje values(1292, 1457);
insert into arbitraje values(1292, 1456);
insert into arbitraje values(1293, 1460);
insert into arbitraje values(1293, 1457);
insert into arbitraje values(1293, 1459);
insert into arbitraje values(1294, 1460);
insert into arbitraje values(1294, 1459);
insert into arbitraje values(1294, 1458);
insert into arbitraje values(1295, 1459);
insert into arbitraje values(1295, 1457);
insert into arbitraje values(1295, 1456);
insert into arbitraje values(1296, 1460);
insert into arbitraje values(1296, 1456);
insert into arbitraje values(1296, 1459);
insert into arbitraje values(1297, 1458);
insert into arbitraje values(1297, 1457);
insert into arbitraje values(1297, 1460);
insert into arbitraje values(1298, 1459);
insert into arbitraje values(1298, 1458);
insert into arbitraje values(1298, 1457);
insert into arbitraje values(1299, 1459);
insert into arbitraje values(1299, 1460);
insert into arbitraje values(1299, 1457);
insert into arbitraje values(1300, 1460);
insert into arbitraje values(1300, 1457);
insert into arbitraje values(1300, 1456);
insert into arbitraje values(1301, 1457);
insert into arbitraje values(1301, 1460);
insert into arbitraje values(1301, 1456);
insert into arbitraje values(1302, 1460);
insert into arbitraje values(1302, 1458);
insert into arbitraje values(1302, 1457);
insert into arbitraje values(1303, 1457);
insert into arbitraje values(1303, 1460);
insert into arbitraje values(1303, 1459);
insert into arbitraje values(1304, 1457);
insert into arbitraje values(1304, 1460);
insert into arbitraje values(1304, 1456);
insert into arbitraje values(1305, 1457);
insert into arbitraje values(1305, 1458);
insert into arbitraje values(1305, 1460);
insert into arbitraje values(1306, 1458);
insert into arbitraje values(1306, 1456);
insert into arbitraje values(1306, 1460);
insert into arbitraje values(1307, 1459);
insert into arbitraje values(1307, 1456);
insert into arbitraje values(1307, 1457);
insert into arbitraje values(1308, 1459);
insert into arbitraje values(1308, 1460);
insert into arbitraje values(1308, 1456);
insert into arbitraje values(1309, 1460);
insert into arbitraje values(1309, 1457);
insert into arbitraje values(1309, 1459);
insert into arbitraje values(1310, 1456);
insert into arbitraje values(1310, 1460);
insert into arbitraje values(1310, 1458);
insert into arbitraje values(1311, 1459);
insert into arbitraje values(1311, 1457);

```

[illegible]

[illegible]

[illegible]

[illegible]



[illegible]



```
insert into arbitraje values(1451, 1459);
insert into arbitraje values(1452, 1457);
insert into arbitraje values(1452, 1460);
insert into arbitraje values(1452, 1459);
insert into arbitraje values(1453, 1456);
insert into arbitraje values(1453, 1457);
insert into arbitraje values(1453, 1458);
insert into arbitraje values(1454, 1459);
insert into arbitraje values(1454, 1457);
insert into arbitraje values(1454, 1458);
insert into arbitraje values(1455, 1460);
insert into arbitraje values(1455, 1457);
insert into arbitraje values(1455, 1459);
```

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]



[illegible]

[illegible]

[illegible]

[illegible]

```

insert into comentarii values(1444, 1463);
insert into comentarii values(1444, 1465);
insert into comentarii values(1445, 1465);
insert into comentarii values(1445, 1462);
insert into comentarii values(1445, 1461);
insert into comentarii values(1446, 1461);
insert into comentarii values(1446, 1465);
insert into comentarii values(1446, 1464);
insert into comentarii values(1447, 1464);
insert into comentarii values(1447, 1465);
insert into comentarii values(1447, 1461);
insert into comentarii values(1448, 1465);
insert into comentarii values(1448, 1463);
insert into comentarii values(1448, 1462);
insert into comentarii values(1449, 1461);
insert into comentarii values(1449, 1462);
insert into comentarii values(1449, 1463);
insert into comentarii values(1450, 1461);
insert into comentarii values(1450, 1465);
insert into comentarii values(1450, 1462);
insert into comentarii values(1451, 1462);
insert into comentarii values(1451, 1464);
insert into comentarii values(1451, 1465);
insert into comentarii values(1452, 1464);
insert into comentarii values(1452, 1461);
insert into comentarii values(1452, 1465);
insert into comentarii values(1453, 1462);
insert into comentarii values(1453, 1465);
insert into comentarii values(1453, 1463);
insert into comentarii values(1454, 1461);
insert into comentarii values(1454, 1464);
insert into comentarii values(1454, 1463);
insert into comentarii values(1455, 1464);
insert into comentarii values(1455, 1461);
insert into comentarii values(1455, 1465);

```

```

insert into distinctii values(1000, 1196, 1476);
insert into distinctii values(1000, 1191, 1477);
insert into distinctii values(1000, 1140, 1478);
insert into distinctii values(1000, 1157, 1479);
insert into distinctii values(1000, 1152, 1480);
insert into distinctii values(1001, 1188, 1476);
insert into distinctii values(1001, 1187, 1477);
insert into distinctii values(1001, 1143, 1478);
insert into distinctii values(1001, 1163, 1479);
insert into distinctii values(1001, 1194, 1480);
insert into distinctii values(1002, 1197, 1476);
insert into distinctii values(1002, 1165, 1477);
insert into distinctii values(1002, 1210, 1478);
insert into distinctii values(1002, 1179, 1479);
insert into distinctii values(1002, 1131, 1480);
insert into distinctii values(1003, 1141, 1476);
insert into distinctii values(1003, 1202, 1477);
insert into distinctii values(1003, 1189, 1478);
insert into distinctii values(1003, 1191, 1479);
insert into distinctii values(1003, 1142, 1480);
insert into distinctii values(1004, 1131, 1476);
insert into distinctii values(1004, 1201, 1477);
insert into distinctii values(1004, 1195, 1478);
insert into distinctii values(1004, 1143, 1479);
insert into distinctii values(1004, 1181, 1480);

```

## 12. 5 cereri SQL:

- subcereri sincronizate (minim 3 tabele)
- subcereri nesincronizate în clauza FROM
- grupări de date, funcții grup, filtrare la nivel de grupuri (în cadrul aceleiași cereri)
- ordonări + NVL și DECODE
- 2 funcții pe șiruri de caractere, 2 funcții pe date calendaristice, expresie CASE
- clauza WITH

```
/*
1. Sa se afiseze numele, numarul de aruncari de 3 puncte marcate ale jucatorilor care au marcat mai multe
aruncari de 3 puncte decat media echipei din care fac parte.
- subcereri sincronizate în care intervin cel puțin 3 tabele
*/

select nume, (select sum(s.aruncari_3pct_marcate)
from statistici s
where s.id_jucator = j.id_jucator) "Aruncari 3pct marcate",
(select avg(s2.aruncari_3pct_marcate)
from statistici s2, echipe e, jucatori j2
where e.id echipa = j.id echipa
and j2.id echipa = e.id echipa
and s2.id_jucator = j2.id_jucator
group by e.id echipa) "AVG echipa"
from jucatori j
where (select sum(s.aruncari_3pct_marcate)
from statistici s
where s.id_jucator = j.id_jucator)
> (select avg(s2.aruncari_3pct_marcate)
from statistici s2, echipe e, jucatori j2
where e.id echipa = j.id echipa
and j2.id echipa = e.id echipa
and s2.id_jucator = j2.id_jucator
group by e.id echipa);
```

	NUME	Aruncari 3pct marcate	AVG echipa
1	Kim	11	7
2	Brown	15	7
3	Taylor	6	5,6
4	Gonzalez	15	5,6
5	Davis	7	5,6

```
/*
1. Sa se afiseze numele, numarul de aruncari de 3 puncte
marcate ale jucatorilor care au marcat mai multe
aruncari de 3 puncte decat media echipei din care fac parte.
- subcereri sincronizate în care intervin cel puțin 3 tabele
*/

select nume, (select sum(s.aruncari_3pct_marcate)
from statistici s
where s.id_jucator = j.id_jucator) "Aruncari
3pct marcate",
(select avg(s2.aruncari_3pct_marcate)
from statistici s2, echipe e, jucatori j2
where e.id echipa = j.id echipa
and j2.id echipa = e.id echipa
and s2.id_jucator = j2.id_jucator
group by e.id echipa) "AVG echipa"
from jucatori j
where (select sum(s.aruncari_3pct_marcate)
from statistici s
where s.id_jucator = j.id_jucator)
> (select avg(s2.aruncari_3pct_marcate)
from statistici s2, echipe e, jucatori j2
where e.id echipa = j.id echipa
and j2.id echipa = e.id echipa
and s2.id_jucator = j2.id_jucator
group by e.id echipa);
```

Worksheet - Query Builder

```

/*
2. Sa se afiseze numele antrenorilor, preparatorilor fizic si nutritionistilor care lucreaza pentru echipe cu numar par de victorii.
- subcereri nesincronizate in clauza FROM
- utilizarea a cel puțin 1 bloc de cerere(clauza WITH)
*/

with ids as (select a.id_angajat as ida, p.id_angajat as idp, n.id_angajat as idn
from (select count(e.id_echipa), e.id_echipa
from echipe e, meciuri m
where (e.id_echipa = m.id_echipa_gazda and m.scor_gazda > m.scor_oaspete)
or (e.id_echipa = m.id_echipa_oaspete and m.scor_gazda < m.scor_oaspete)
having mod(count(e.id_echipa), 2) = 0
group by e.id_echipa) aux
join echipe e on e.id_echipa = aux.id_echipa
join antrenori a on e.id_antrenor = a.id_angajat
join preparatori_fizici p on e.id_preparator = p.id_angajat
join nutritionisti n on e.id_nutritionist = n.id_angajat)
select nume || ' ' || prenume
from angajati a, ids
where a.id_angajat = ids.ida
or a.id_angajat = ids.idp
or a.id_angajat = ids.idn;

```

Script Output: All Rows Fetched: 12 in 0.002 seconds

ID	NAME	PRENAME
1	Taylor	Ethan
2	Wilson	Leo
3	Wong	Ethan
4	Davis	Gabriel
5	Brown	Caleb
6	Wong	Ethan
7	Chen	Ethan
8	Khan	Gideon
9	Smith	Isaac
10	Wong	Ezra
11	Patel	Jasper
12	Singh	Caleb

/\*

2. Sa se afiseze numele antrenorilor, preparatorilor fizic si nutritionistilor care lucreaza pentru echipe cu numar par de victorii.

- subcereri nesincronizate în clauza FROM

- utilizarea a cel puțin 1 bloc de cerere(clauza WITH)

\*/

```

with ids as (select a.id_angajat as ida, p.id_angajat as idp,
n.id_angajat as idn
from (select count(e.id_echipa), e.id_echipa
from echipe e, meciuri m
where (e.id_echipa = m.id_echipa_gazda and
m.scor_gazda > m.scor_oaspete)
or (e.id_echipa = m.id_echipa_oaspete and
m.scor_gazda < m.scor_oaspete)
having mod(count(e.id_echipa), 2) = 0
group by e.id_echipa) aux
join echipe e on e.id_echipa = aux.id_echipa
join antrenori a on e.id_antrenor =
a.id_angajat
join preparatori_fizici p on e.id_preparator =
p.id_angajat
join nutritionisti n on e.id_nutritionist =
n.id_angajat)
select nume || ' ' || prenume
from angajati a, ids
where a.id_angajat = ids.ida
or a.id_angajat = ids.idp
or a.id_angajat = ids.idn;

```

Worksheet - Query Builder

```

/*
3. Sa se afiseze jucatorii cu ultima litera din nume diferita de ultima litera din prenume din echipele care
- grupări de date cu subcereri nesincronizate in care intervin cel puțin 3 tabele, funcții grup, filtrare
- functie pe siruri de caractere (substr)
*/

select j2.numa, j2.prenume, j2.id_echipa
from jucatori j2, (select avg(3 * s.aruncari_3pct_marcate + 2 * s.aruncari_2pct_marcate + s.aruncari_libere_marcate)
from statistici s, echipe e, jucatori j
where j.id_echipa = e.id_echipa
and s.id_jucator = j.id_jucator
group by e.id_echipa)
having avg(3 * s.aruncari_3pct_marcate + 2 * s.aruncari_2pct_marcate + s.aruncari_libere_marcate) > 30
where j2.id_echipa = temp.id
and substr(j2.numa, -1, 1) <> substr(j2.prenume, -1, 1);

```

Script Output: All Rows Fetched: 9 in 0.003 seconds

ID	NAME	PRENAME	ID_ECHIPA
1	Lopez	Maxwell	1115
2	Kim	Maxwell	1115
3	Patel	Sebastian	1115
4	Hernandez	Ethan	1115
5	Brown	Asher	1115
6	Taylor	Gideon	1130
7	Gonzalez	Leo	1130
8	Wong	Gideon	1130
9	Lee	Wyatt	1130

/\*

3. Sa se afiseze jucatorii cu ultima litera din nume diferita de ultima litera din prenume din echipele care au marcat in medie mai mult de 30 de puncte pe meci;

- grupări de date cu subcereri nesincronizate in care intervin cel puțin 3 tabele, funcții grup, filtrare la nivel degrupuri(in cadrul aceleiasi cereri)

- functie pe siruri de caractere (substr)

\*/

```

select j2.numa, j2.prenume, j2.id_echipa
from jucatori j2, (select avg(3 * s.aruncari_3pct_marcate + 2
* s.aruncari_2pct_marcate + s.aruncari_libere_marcate),
e.id_echipa as ide
from statistici s, echipe e, jucatori j
where j.id_echipa = e.id_echipa
and s.id_jucator = j.id_jucator
group by e.id_echipa
having avg(3 * s.aruncari_3pct_marcate + 2 *
s.aruncari_2pct_marcate + s.aruncari_libere_marcate) > 30)
temp
where j2.id_echipa = temp.id
and substr(j2.numa, -1, 1) <> substr(j2.prenume, -1, 1);

```

```

/*
4. Pentru fiecare echipa sa se afiseze numele si suma
salariilor jucatorilor cu inaltime
mai mica de 195cm si salariu mai mic de 45000. Sa se
ordoneze descrescator in functie de suma.
- ordonări si utilizarea funcțiilor NVL și DECODE (in
cadrul aceleiasi cereri)
*/

select e.ume, temp.sum
from echipe e, (select sum(decode(sign(45000 - j.salariu), 1,
j.salariu, 0)) as sum, j.id_echipa
                from jucatori j
                where nvl(j.inaltime, 2) < 1.95
                group by j.id_echipa) temp
where e.id_echipa = temp.id_echipa
order by temp.sum desc;

```

```

/*
5. Pentru toti arbitrii care si-au obtinut licenta intr-o zi a
lunii impara, sa se afiseze
numele daca lungimea acestuia este para, altfel sa se afiseze
prenumele.
Sa se afiseze si luna otinerii licentei in format intreg.
Sa se ordoneze crescator dupa lungimea numelui si a
prenumelui concatenate.
- functii pe date calendaristice (to_char, extract)
- functii pe siruri de caractere (length)
- eexpresie CASE
*/

select id_arbitru,
case mod(length(a.num), 2) when 0 then a.num when 1
then a.pnum end ,
to_char (a.data_obtinere_licenta, 'Month')
from arbitrii a
where mod(extract(day from a.data_obtinere_licenta), 2) = 1
order by length(a.num || a.pnum);

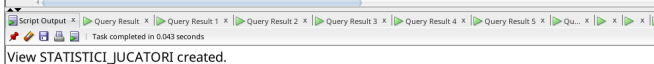
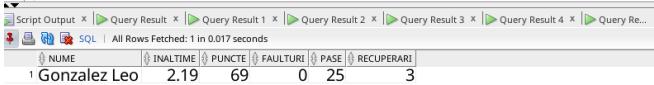
```

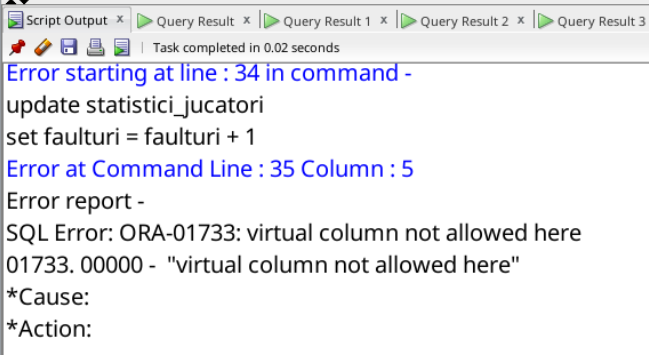


## 13. 3 operații de actualizare și de suprimare a datelor.

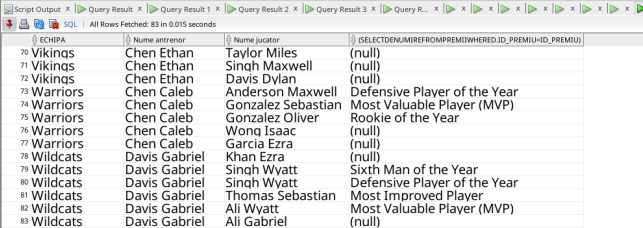
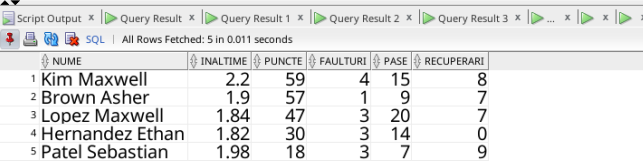
<pre> /* 1. Sa se actualizeze salariu jucatorului Hernandez Sebastian cu valoarea medie a salariilor tuturor jucatorilor. */  update jucatori j set j.salariu = (select avg(j2.salariu) from jucatori j2) where lower(j.numa) = 'hernandez' and lower(j.prenume) = 'sebastian'; </pre> <p>Script Output: x Query Result: x Query Result 1 x Query Result 2 x Query Result 3 x Query Result 4 x Query Result 5 x Qu... x x x x x</p> <p>Task completed in 0.012 seconds</p> <p>1 row inserted.</p>	<pre> /* 1. Sa se actualizeze salariu jucatorului Hernandez Sebastian cu valoarea medie a salariilor tuturor jucatorilor. */  update jucatori j set j.salariu = (select avg(j2.salariu) from jucatori j2) where lower(j.numa) = 'hernandez' and lower(j.prenume) = 'sebastian'; </pre>
<pre> /* 2. Sa se stearga comentariile din meciurile in care echipa oaspete a castigat */  delete from comentarii c where exists (select '*' from meciuri m where c.id_meci = m.id_meci and m.scor_oaspete &gt; m.scor_gazda); </pre> <p>Script Output: x Query Result: x Query Result 1 x Query Result 2 x Query Result 3 x Query Result 4 x Query Result</p> <p>Task completed in 0.027 seconds</p> <p>381 rows deleted.</p>	<pre> /* 2. Sa se stearga comentariile din meciurile in care echipa oaspete a castigat */  delete from comentarii c where exists (select '*' from meciuri m where c.id_meci = m.id_meci and m.scor_oaspete &gt; m.scor_gazda) </pre>
<pre> /* 3. Sa se actualizeze data obtinerii licentei a arbitrilor care si-au obtinut licenta inainte de 1980 cu valoare datei curente. */  update arbitrii a set a.data_obtinere_licenta = (select sysdate from dual) where extract(year from a.data_obtinere_licenta) &lt; 1980; </pre> <p>Script Output: x Query Result: x Query Result 1 x Query Result 2 x Query Result 3 x Query Result 4 x Query Result</p> <p>Task completed in 0.011 seconds</p> <p>2 rows updated.</p>	<pre> /* 3. Sa se actualizeze data obtinerii licentei a arbitrilor care si- au obtinut licenta inainte de 1980 cu valoare datei curente. */  update arbitrii a set a.data_obtinere_licenta = (select sysdate from dual) where extract(year from a.data_obtinere_licenta) &lt; 1980; </pre>

## 14. Crearea unei vizualizări complexe + operație LMD permisă, operație LMD nepermisă.

<pre>/* Sa se creeze o vizualizare ce permite doar citirea datelor si care contie numele jucatorilor, inaltimea, numarul de puncte marcate, numarul de faulturi, numarul de pase decisive si numarul de recuperari. */  create or replace view statistici_jucatori as select j.ume    ' '    j.prenume nume, j.inaltime, (select sum(3 * s.aruncari_3pct_marcate + 2 * s.aruncari_2pct_marcate + aruncari_libere_marcate) from statistici s where s.id_jucator = j.id_jucator) puncte, (select sum(s.faulturi) from statistici s where s.id_jucator = j.id_jucator) faulturi, (select sum(s.pase_decisive) from statistici s where s.id_jucator = j.id_jucator) pase, (select sum(s.recuperari) from statistici s where s.id_jucator = j.id_jucator) recuperari from jucatori j with read only;</pre> 	<pre>/* Sa se creeze o vizualizare ce permite doar citirea datelor si care contie numele jucatorilor, inaltimea, numarul de puncte marcate, numarul de faulturi, numarul de pase decisive si numarul de recuperari. */  create or replace view statistici_jucatori as select j.ume    ' '    j.prenume nume, j.inaltime, (select sum(3 * s.aruncari_3pct_marcate + 2 * s.aruncari_2pct_marcate + aruncari_libere_marcate) from statistici s where s.id_jucator = j.id_jucator) puncte, (select sum(s.faulturi) from statistici s where s.id_jucator = j.id_jucator) faulturi, (select sum(s.pase_decisive) from statistici s where s.id_jucator = j.id_jucator) pase, (select sum(s.recuperari) from statistici s where s.id_jucator = j.id_jucator) recuperari from jucatori j with read only;</pre>
<pre>/* Operatie permisa: */  select * from statistici_jucatori s where s.puncte = (select max(puncte) from statistici_jucatori);</pre> 	<pre>/* Operatie permisa: */  select * from statistici_jucatori s where s.puncte = (select max(puncte) from statistici_jucatori);</pre>

<pre>/* Operatie nepermisa: */  update statistici_jucatori set faulturi = faulturi + 1;</pre>  <p>The screenshot shows a SQL script execution window. At the top, there are tabs for 'Script Output', 'Query Result', 'Query Result 1', 'Query Result 2', and 'Query Result 3'. Below the tabs, it says 'Task completed in 0.02 seconds'. The main area displays an error message: 'Error starting at line : 34 in command - update statistici_jucatori set faulturi = faulturi + 1'. Below this, it says 'Error at Command Line : 35 Column : 5' and 'Error report - SQL Error: ORA-01733: virtual column not allowed here 01733. 00000 - "virtual column not allowed here"'. At the bottom, it lists '*Cause:' and '*Action:'.</p> <p>Error starting at line : 34 in command - update statistici_jucatori set faulturi = faulturi + 1 Error at Command Line : 35 Column : 5 Error report - SQL Error: ORA-01733: virtual column not allowed here 01733. 00000 - "virtual column not allowed here" *Cause: *Action:</p>	<pre>/* Operatie nepermisa: */  update statistici_jucatori set faulturi = faulturi + 1;</pre>
---	---

## 15. Cereri SQL: outer-join pe minimum 4 tabele, operația division, analiza top-n.

<pre> /* 1. Outer Join Sa se afiseze pentru fiecare jucator numele echipei, al antrenorului si toate premiile castigate. */  select e.ume echipa, a.ume    ' '    a.prenume "Nume antrenor", j.ume    ' '    j.prenume "Nume j from jucatori j full outer join distinctii d on d.id_jucator = j.id_jucator full outer join echipe e on e.id echipa = j.id echipa join angajati a on a.id_angajat = e.id_antrenor order by 1; </pre> 	<pre> /* 1. Outer Join Sa se afiseze pentru fiecare jucator numele echipei, al antrenorului si toate premiile castigate. */  select e.ume echipa, a.ume    ' '    a.prenume "Nume antrenor", j.ume    ' '    j.prenume "Nume jucator", (select denumire from premii where d.id_premiu = id_premiu) from jucatori j full outer join distinctii d on d.id_jucator = j.id_jucator full outer join echipe e on e.id echipa = j.id echipa join angajati a on a.id_angajat = e.id_antrenor order by 1; </pre>
<pre> /* 2. Top-n Folosind vizualizarea STATISTICI_JUCATORII, sa se afiseze cei 5 jucatori cu cele mai multe puncte marcate, precum si statisticile acestora. */  select * from statistici_jucatori where rownum &lt;= 5 order by puncte desc; </pre> 	<pre> /* 2. Top-n Folosind vizualizarea STATISTICI_JUCATORII, sa se afiseze cei 5 jucatori cu cele mai multe puncte marcate, precum si statisticile acestora. */  select * from statistici_jucatori where rownum &lt;= 5 order by puncte desc; </pre>

	Query Result 1	Query Result 2	Query Result 3	Query Result 4	Query Result 5	Query Result 6	Query Result 7	Query Result 8	Query Result 9	Query Result 10	Query Result 11
1	All Rows Fetched & 0 in SQL cache										
2	Player	Team	Position	Age							
3	1131 Lopez	Maxwell	Most Improved Player								
4	1131 Lopez	Maxwell	Most Valuable Player (MVP)								
5	1142 Thomas	Sebastian	Most Improved Player								
6	1152 Smith	Leo	Most Improved Player								
7	1181 Brown	Asher	Most Improved Player								
8	1194 Wilson	Leo	Most Improved Player								

```
select j.id_jucator, j.num, j.preume, p.denumire
from jucatori j
join distinctii d on d.id_jucator = j.id_jucator
join premii p on p.id_premiu = d.id_premiu
where not exists (select '*' from distinctii d where
d.id_jucator = 1181 and
not exists (select '*' from
distinctii d2 where d2.id_jucator = j.id_jucator
and d2.id_premiu = d.id_premiu));
```

## 16. Optimizarea unei cereri

Cerinta: Sa se afiseze codul meciului in care au jucat mai mult de 40 min si numele intreg al jucatorilor al caror prenume incepe cu litera 'm' si fac parte dintr-o echipa infiintata inainte de 2010;

VARIANTA NEOPTIMIZATA	VARIANTA OPTIMIZATA
<p> R1 = JUCATORI * STATISTICI * MECIURI * ECHIPE  R2 = SELECT (R1, JUCATORI.id_jucator = STATISTICI.id_jucator)  R3 = SELECT (R2, STATISTICI.id_meci = MECIURI.id_meci)  R4 = SELECT (R3, JUCATORI.id echipa = ECHIPE.id echipa)  R5 = SELECT (R4, lower(prenume) like 'm%')  R6 = SELECT (R5, an_infiintare &lt; 2010)  R7 = SELECT (R6, minute_jucate &gt; 40)  REZULTAT = PROJECT (R7, id_meci, nume, prenume) </p>	<p> R1 = SELECT (JUCATORI, lower(prenume) like 'm%')  R2 = PROJECT (R1, id_jucator, id echipa, nume, prenume)  R3 = SELECT (ECHIPE, an_infiintare &lt; 2010)  R4 = PROJECT (R3, id echipa)  R5 = SELECT (STATISTICI, minute_jucate &gt; 40)  R6 = PROJECT (R5, id_statistica, id_meci, id_jucator)    R7 = JOIN(R2, R4)  R8 = JOIN(R7, R6)    REZULTAT = PROJECT(R8, id_meci, nume, prenume) </p>

```

select m.id_meci, j.nume, j.prenume
from jucatori j, statistici s, meciuri m, echipe e
where j.id_jucator = s.id_jucator
and s.id_meci = m.id_meci
and j.id echipa = e.id echipa
and lower(j.prenume) like 'm%'
and e.an_infiintare < 2010
and s.minute_jucate > 40;

```

```

with R2 as (select j.id_jucator, j.id echipa,
j.nume, j.prenume from jucatori j where
lower(j.prenume) like 'm%'),
R4 as (select e.id echipa from echipe e where
e.an_infiintare < 2010),
R6 as (select s.id_statistica, s.id_meci,
s.id_jucator from statistici s where
s.minute_jucate > 40)
select id_meci, nume, prenume
from R2
join R4 on R2.id echipa = R4.id echipa
join R6 on R6.id_jucator = R2.id_jucator;

```

#### Observatii:

- produsul cu tabela MECIURI este redundant deoarece putem obtine id\_meci din tabela STATISTICI
- regula de optimizare 2: am inlocuit produsul cartezian cu mai multe joinuri
- regula de optimizare 1: am efectuat selecturile cat mai devreme posibil pentru a elimina informatiile nenecesare
- regula de optimizare 3: am efectuat JOIN-ul cu tabela ECHIPE inaintea JOIN-ului cu tablea STATISTICI deoarece primul join este mai restrictiv si contine mai putine date
- regula de optimizare 4: am efectuat PROJECT-uri pentru a elimina coloanele inutile

# ANEXA

## Codul Python utilizat pentru generarea comenzilor SQL pentru inserare:

```
import random

first_names = ['Ethan', 'Isaac', 'Leo', 'Miles', 'Asher',
               'Maxwell', 'Oscar', 'Dylan', 'Oliver', 'Harrison',
               'Nathan', 'Gabriel', 'Jasper', 'Ezra', 'Silas',
               'Sebastian', 'Caleb', 'Gideon', 'Wyatt', 'Finn']
last_names = ['Garcia', 'Lee', 'Chen', 'Ali', 'Nguyen',
              'Patel', 'Smith', 'Wong', 'Gonzalez', 'Brown',
              'Khan', 'Singh', 'Lopez', 'Hernandez', 'Kim',
              'Wilson', 'Davis', 'Taylor', 'Anderson', 'Thomas']
team_names = ['Lightning Bolts', 'Thunderbirds', 'Wildcats', 'Heatwave',
              'Hurricanes', 'Jaguars', 'Patriots', 'Titans',
              'Vikings', 'Dragons', 'Raptors', 'Warriors',
              'Hornets', 'Sharks', 'Lions', 'Knights']
arena_names = ['The Thunderdome', 'The Coliseum', 'The Pit', 'The Garden',
               'The Staples Center', 'The Oracle', 'The Hoop House', 'The Den',
               'The Arena', 'The Thunderdome', 'The Dome', 'The Palace',
               'The Madhouse', 'The Pavilion', 'The Buzzer Beater', 'The Swish Center']
awards = ['Most Valuable Player (MVP)', 'Rookie of the Year',
          'Defensive Player of the Year', 'Sixth Man of the Year', 'Most Improved Player']
locations = [
    ('USA', 'New York City', 'Fifth Avenue', 742),
    ('USA', 'Los Angeles', 'Hollywood Boulevard', 6801),
    ('USA', 'Las Vegas', 'Las Vegas Boulevard', 3570),
    ('USA', 'Chicago', 'Michigan Avenue', 875),
    ('USA', 'San Francisco', 'Lombard Street', 1099),
    ('USA', 'Miami', 'Ocean Drive', 100),
    ('USA', 'Orlando', 'International Drive', 8000),
    ('USA', 'Houston', 'NASA Road 1', 1601),
    ('USA', 'Seattle', 'Pike Place Market', 85),
    ('USA', 'Washington D.C.', '1600 Pennsylvania Avenue NW', 1600),
    ('USA', 'Boston', 'Fenway Park', 4),
    ('USA', 'Atlanta', 'Peachtree Street', 303),
    ('USA', 'Dallas', 'Dealey Plaza', 411),
    ('USA', 'Denver', '16th Street Mall', 1001),
    ('USA', 'New Orleans', 'Bourbon Street', 500),
    ('USA', 'San Diego', 'Balboa Park', 1549)
]
```



```

def getDate(day, month, year):
    dstr = str(day)
    if day < 10:
        dstr = "0" + dstr
    mstr = str(month)
    if month < 10:
        mstr = "0" + mstr
    ystr = str(year)
    if year < 1000:
        ystr = "0" + ystr
    string = f"to_date('{dstr}-{mstr}-{ystr}', 'DD-MM-YYYY')"
    return string

nr_sezoane = 5
def insertSezoane():
    with open("insert-sezoane.txt", 'w') as f:
        for i in range(nr_sezoane):
            data_start = getDate(15, 8, 2023 - i)
            data_final = getDate(10, 6, 2024 - i)
            query = f"insert into sezoane values(idseq.nextval, {data_start}, {data_final});"
            print(query, file=f)

id_sezon = 1000
nr_etape = 30

def insertEtape():
    with open("insert-etape.txt", 'w') as f:
        for i in range(nr_etape):
            query = f"insert into etape values(idseq.nextval, {id_sezon}, {i+1});"
            print(query, file=f)

id_etapa = 1005
nr_angajati = 48

def insertAngajati():
    with open('insert-angajati.txt', 'w') as f:
        for i in range(nr_angajati):
            nume = last_names[random.randint(0, 19)]
            prenume = first_names[random.randint(0, 19)]
            salary = str(random.randint(100, 200) * 100)
            query = f"insert into angajati values(idseq.nextval, '{nume}', '{prenume}', {salary});"
            print(query, file=f)

id_angajat = 1035
nr_antrenori = 16

```

```

def insertAntrenori():
    with open('insert-antrenori.txt', 'w') as f:
        for id in range(id_angajat, id_angajat + 16):
            query = f"insert into antrenori values({id});"
            print(query, file=f)
id_antrenor = 1035

nr_preparatori = 16
id_preparator = 1051
def insertPreparatoriFizici():
    with open('insert-preparatori.txt', 'w') as f:
        for id in range(id_angajat + 16, id_angajat + 32):
            query = f"insert into preparatori_fizici values({id});"
            print(query, file=f)

nr_nutritionisti = 16
def insertNutritionisti():
    with open('insert-nutritionisti.txt', 'w') as f:
        for id in range(id_angajat + 32, id_angajat + 48):
            query = f"insert into nutritionisti values({id});"
            print(query, file=f)

id_nutritionist = 1067

nr_locatii = 16
id_locatie = 1083
def insertLocatii():
    with open('insert-locatii.txt', 'w') as f:
        for i in range(nr_locatii):
            tara = locations[i][0]
            oras = locations[i][1]
            strada = locations[i][2]
            nr = locations[i][3]
            query = f"insert into locatii values(idseq.nextval, '{tara}', '{oras}', '{strada}', '{nr});"
            print(query, file=f)

nr_arene = 16
id_arena = 1099
def insertArene():
    with open('insert-arene.txt', 'w') as f:
        for i in range(nr_arene):
            nume = arena_names[i]
            locuri = random.randint(20, 40) * 1000
            query = f"insert into arene values(idseq.nextval, {id_locatie + i}, '{nume}', {locuri});"
            print(query, file=f)

nr_echipe = 16

```

```

id_echipa = 1115
def insertEchipe():
    with open('insert-echipe.txt', 'w') as f:
        for i in range(nr_echipe):
            nume = team_names[i]
            an = random.randint(1970, 2010)
            query = f"insert into echipe values(idseq.nextval, {id_arena+i}, {id_antrenor+i},
{id_preparator+i})" \
                f",{id_nutritionist+i}, '{nume}', {an});"
            print(query, file=f)

nr_jucatori_ech = 5
id_jucator = 1131
def insertJucatori():
    with open('insert-jucatori.txt', 'w') as f:
        for ech in range(nr_echipe):
            for i in range(nr_jucatori_ech):
                nume = last_names[random.randint(0, 19)]
                prenume = first_names[random.randint(0, 19)]
                h = 1.8 + random.random() * 0.4
                inaltime = round(h, 2)
                salariu = random.randint(30, 50) * 1000
                query = f"insert into jucatori values(idseq.nextval, {id_echipa + ech}, '{nume}', '{prenume}',
{inaltime}, {salariu});"
                print(query, file=f)

nr_echipe_med = 5
id_echipe_med = 1211
def insertEchipeMedicale():
    with open('insert-med.txt', 'w') as f:
        for i in range(nr_echipe_med):
            query = f"insert into echipe_medicale values(idseq.nextval);"
            print(query, file=f)

nr_meciuri = 240
id_meci = 1216

def insertMeciuri():
    with open('insert-meciuri.txt', 'w') as f:
        arr = [[i for i in range(8)], [(15-i) for i in range(8)]]
        reverse = False

        for nret in range(30):
            for i in range(8):
                home = id_echipa + arr[0][i]
                away = id_echipa + arr[1][i]
                med = id_echipe_med + random.randint(0, nr_echipe_med-1)

```

```

        if reverse == True:
            home, away = away, home
            score_home = random.randint(50, 120)
            score_away = random.randint(50, 120)
            while score_away == score_home:
                score_away = random.randint(50, 120)

        query = f"insert into meciuri values(idseq.nextval, {id_etapa + nret}, {home}, {away},
{med}, {score_home}, {score_away});"
        print(query, file=f)

    temp = arr[1][0]
    for i in range(7):
        arr[1][i] = arr[1][i+1]
    arr[1][7] = arr[0][7]
    for i in range(7, 1, -1):
        arr[0][i] = arr[0][i-1]
    arr[0][1] = temp

    if arr[0][1] == 2:
        reverse = True

nr_arbitrii = 5
id_arbitru = 1456
def insertArbitrii():
    with open('insert-arbitrii.txt', 'w') as f:
        for i in range(nr_arbitrii):
            nume = last_names[random.randint(0, 19)]
            prenume = first_names[random.randint(0, 19)]
            obt = getDate(random.randint(1, 28), random.randint(1, 12), random.randint(1970, 2000))
            query = f"insert into arbitrii values(idseq.nextval, '{nume}', '{prenume}', {obt});"
            print(query, file=f)

nr_comentatori = 5
id_comentator = 1461
def insertComentatori():
    with open('insert-comentatori.txt', 'w') as f:
        for i in range(nr_comentatori):
            nume = last_names[random.randint(0, 19)]
            prenume = first_names[random.randint(0, 19)]
            query = f"insert into comentatori values(idseq.nextval, '{nume}', '{prenume}');"
            print(query, file=f)

nr_statistici = 10
id_statistica = 1466

```

```

def insertStatistici():
    with open('insert-statistici.txt', 'w') as f:
        idmeci = 1216 #primul meci
        idhome = 1115
        idaway = 1130
        idhome_player = 1131
        idaway_player = 1206

        for i in range(5):
            min = random.randint(20, 48)
            a2 = random.randint(0, 30)
            a2m = random.randint(0, a2)
            a3 = random.randint(0, 20)
            a3m = random.randint(0, a3)
            al = random.randint(0, 16)
            alm = random.randint(0, al)
            pase = random.randint(0, 25)
            recup = random.randint(0, 10)
            fault = random.randint(0, 5)
            query = f"insert into statistici values(idseq.nextval, {idmeci}, {idhome_player+i}, "\
                f"{min}, {a2}, {a2m}, {a3}, {a3m}, {al}, {alm}, {pase}, {recup}, {fault});"
            print(query, file=f)

        for i in range(5):
            min = random.randint(20, 48)
            a2 = random.randint(0, 30)
            a2m = random.randint(0, a2)
            a3 = random.randint(0, 20)
            a3m = random.randint(0, a3)
            al = random.randint(0, 16)
            alm = random.randint(0, al)
            pase = random.randint(0, 25)
            recup = random.randint(0, 10)
            fault = random.randint(0, 5)
            query = f"insert into statistici values(idseq.nextval, {idmeci}, {idaway_player + i}, "\
                f"{min}, {a2}, {a2m}, {a3}, {a3m}, {al}, {alm}, {pase}, {recup}, {fault});"
            print(query, file=f)

nr_premii = 5
id_premiu = 1476
def insertPremii():
    with open('insert-premii.txt', 'w') as f:
        for i in range(nr_premii):
            denumire = awards[i]
            query = f"insert into premii values(idseq.nextval, '{denumire}');"
            print(query, file=f)

```

```

def insertParticipari():
    with open('insert-participari.txt', 'w') as f:
        for i in range(nr_echipe):
            query = f"insert into participari values({id_sezon}, {id_echipa + i});"
            print(query, file=f)

def insertArbitraje():
    with open('insert-arbitraje.txt', 'w') as f:
        for i in range(nr_meciuri):
            id1 = id_arbitru + random.randint(0, nr_arbitrii - 1)
            id2 = id_arbitru + random.randint(0, nr_arbitrii - 1)
            while id2 == id1:
                id2 = id_arbitru + random.randint(0, nr_arbitrii - 1)
            id3 = id_arbitru + random.randint(0, nr_arbitrii - 1)
            while id3 == id2 or id3 == id1:
                id3 = id_arbitru + random.randint(0, nr_arbitrii - 1)

            query = f"insert into arbitraje values({id_meci + i}, {id1});"
            print(query, file=f)
            query = f"insert into arbitraje values({id_meci + i}, {id2});"
            print(query, file=f)
            query = f"insert into arbitraje values({id_meci + i}, {id3});"
            print(query, file=f)

def insertComentarii():
    with open('insert-comentarii.txt', 'w') as f:
        for i in range(nr_meciuri):
            id1 = id_comentator + random.randint(0, nr_comentatori - 1)
            id2 = id_comentator + random.randint(0, nr_comentatori - 1)
            while id2 == id1:
                id2 = id_comentator + random.randint(0, nr_comentatori - 1)
            id3 = id_comentator + random.randint(0, nr_comentatori - 1)
            while id3 == id2 or id3 == id1:
                id3 = id_comentator + random.randint(0, nr_comentatori - 1)

            query = f"insert into comentarii values({id_meci + i}, {id1});"
            print(query, file=f)
            query = f"insert into comentarii values({id_meci + i}, {id2});"
            print(query, file=f)
            query = f"insert into comentarii values({id_meci + i}, {id3});"
            print(query, file=f)

```

```

def insertDistinctii():
    with open('insert-distinctii.txt', 'w') as f:
        for idsez in range(id_sezon, id_sezon + nr_sezoane):
            for idpr in range(id_premiu, id_premiu + nr_premii):
                juc = id_jucator + random.randint(0, nr_jucatori_ech * nr_echipe - 1)
                query = f"insert into distinctii values({idsez}, {juc}, {idpr});"
                print(query, file=f)

```

```

insertSezoane()
insertEtape()
insertAngajati()
insertAntrenori()
insertPreparatoriFizici()
insertNutritionisti()
insertLocatii()
insertArene()
insertEchipe()
insertJucatori()
insertEchipeMedicale()
insertMeciuri()
insertArbitrii()
insertComentatori()
insertStatistici()
insertPremii()
insertParticipari()
insertArbitraje()
insertComentarii()
insertDistinctii()

```