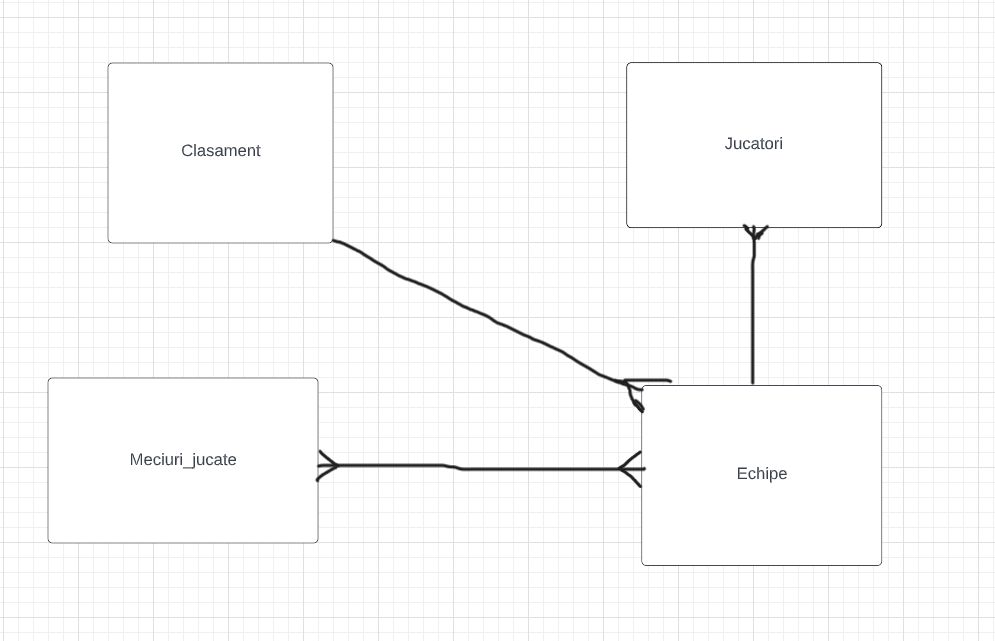
**PROIECT BAZE DE DATE – TORNACI YASIN GRUPA 1060E**

**Am ales sa realizez baza de date a unei competitii prestigioase de fotbal in Romania ( Liga 1 ):**

****

**Fiecare clasament are una sau mai multe echipe;**

**Fiecare echipa apare intr-un singur clasament;**

**Fiecare echipa are unul sau mai multe meciuri jucate;**

**Fiecare meci jucat este jucat de mai multe echipe;**

**Fiecare jucator joaca la o singura echipa;**

**Fiecare echipa are mai multi jucatori;**

**--crearea tabelelor--**

create table **jucatori**

(CNP varchar(13) constraint pk\_cnp primary key,

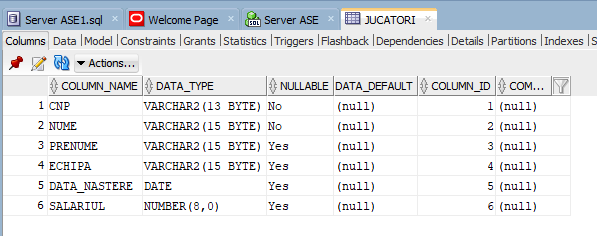
nume varchar(15) not null,

prenume varchar(15),

echipa varchar(15),

data\_nastere date,

salariul number(8));



create table **echipe**

(idechipa number(10) constraint pk\_idechipa primary key,

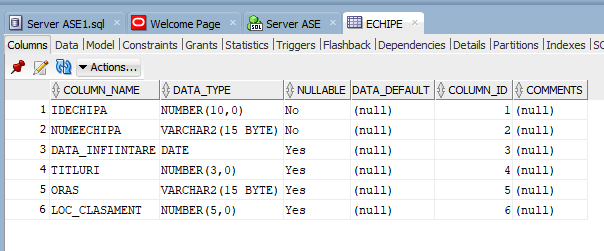
numeechipa varchar(15) not null,

data\_infiintare date,

titluri number(3),

oras varchar(15),

loc\_clasament number(5));



create table **clasament**

(loc\_clasament number(5) constraint pk\_loc\_clasament primary key,

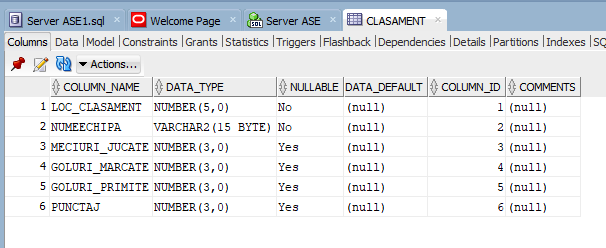
numeechipa varchar(15) not null,

meciuri\_jucate number(3),

goluri\_marcate number(3),

goluri\_primite number(3),

punctaj number(3));



create table **meciuri\_jucate**

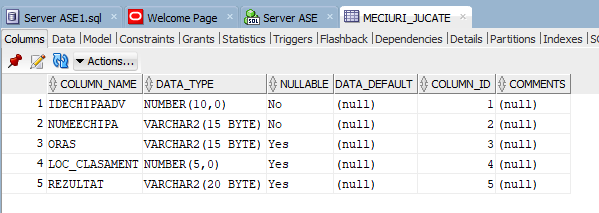
(idechipaadv number(10) constraint pk\_idechipaadv primary key,

numeechipa varchar(15) not null,

oras varchar(15),

loc\_clasament number(5),

rezultat varchar(20) constraint check\_rezultat check(rezultat in('victorie','egal','infrangere')));



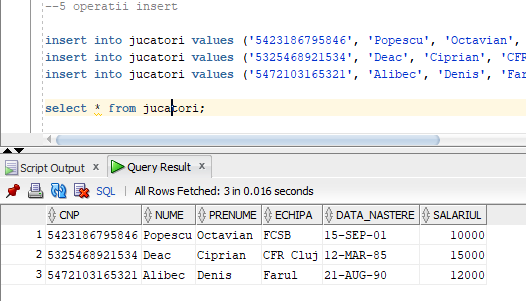
**--5 operatii insert**

insert into jucatori values ('5423186795846', 'Popescu', 'Octavian', 'FCSB', to\_date('15-09-2001', 'dd-mm-yyyy'),'10000');

insert into jucatori values ('5325468921534', 'Deac', 'Ciprian', 'CFR Cluj', to\_date('12-03-1985', 'dd-mm-yyyy'),'15000');

insert into jucatori values ('5472103165321', 'Alibec', 'Denis', 'Farul', to\_date('21-08-1990', 'dd-mm-yyyy'),'12000');

select \* from jucatori;

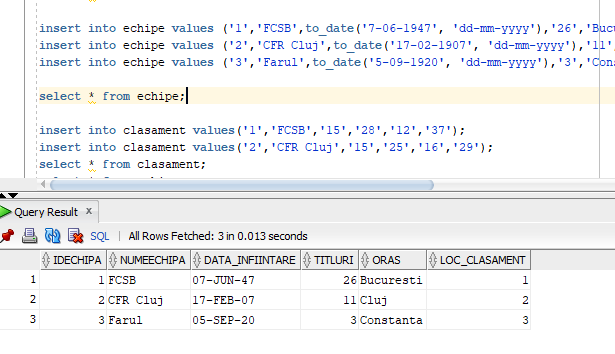


insert into echipe values ('1','FCSB',to\_date('7-06-1947', 'dd-mm-yyyy'),'26','Bucuresti','1');

insert into echipe values ('2','CFR Cluj',to\_date('17-02-1907', 'dd-mm-yyyy'),'11','Cluj','2');

insert into echipe values ('3','Farul',to\_date('5-09-1920', 'dd-mm-yyyy'),'3','Constanta','3');

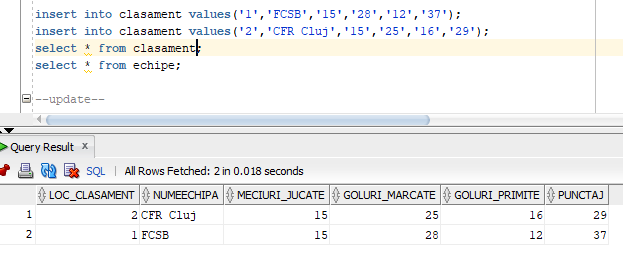
select \* from echipe;



insert into clasament values('1','FCSB','15','28','12','37');

insert into clasament values('2','CFR Cluj','15','25','16','29');

select \* from clasament;



**--update--**

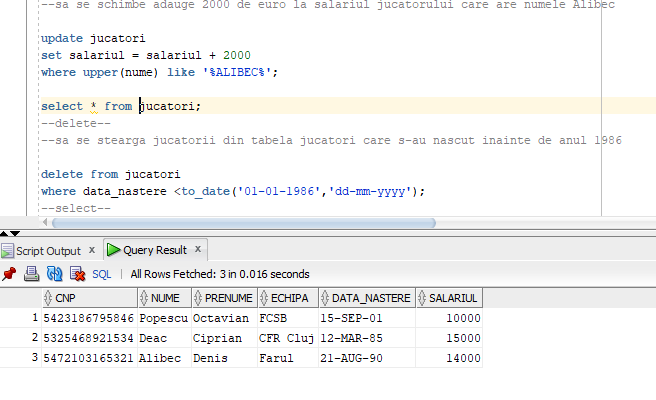
**--sa se schimbe adauge 2000 de euro la salariul jucatorului care are numele Alibec**

update jucatori

set salariul = salariul + 2000

where upper(nume) like '%ALIBEC%';

select \* from jucatori;



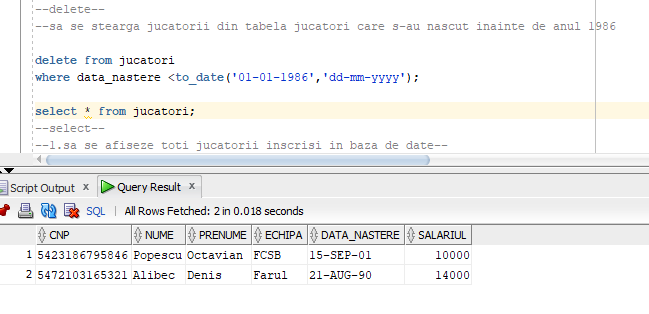
**--delete--**

**--sa se stearga jucatorii din tabela jucatori care s-au nascut inainte de anul 1986**

delete from jucatori

where data\_nastere <to\_date('01-01-1986','dd-mm-yyyy');

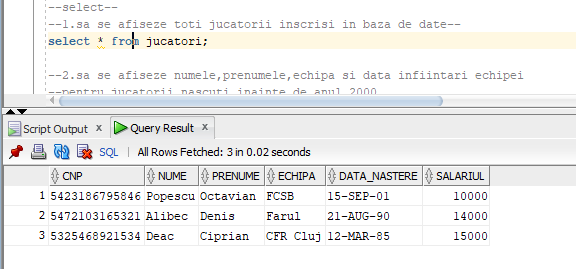
select \* from jucatori;



**--select--**

**--1.sa se afiseze toti jucatorii inscrisi in baza de date(am reintrodus valoarea stearsa la pasul anterior)--**

select \* from jucatori;



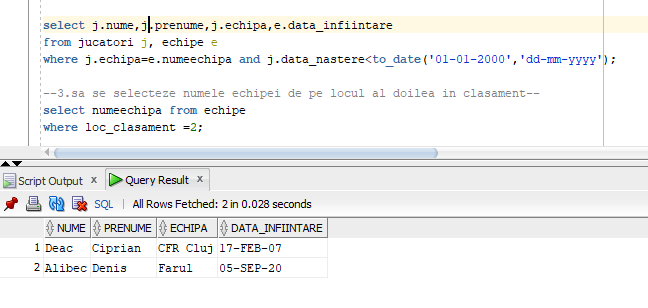
**--2.sa se afiseze numele,prenumele,echipa si data infiintari echipei**

**--pentru jucatorii nascuti inainte de anul 2000**

select j.nume,j.prenume,j.echipa,e.data\_infiintare

from jucatori j, echipe e

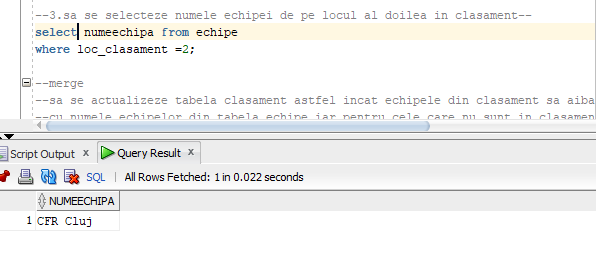
where j.echipa=e.numeechipa and j.data\_nastere<to\_date('01-01-2000','dd-mm-yyyy');



**--3.sa se selecteze numele echipei de pe locul al doilea in clasament--**

select numeechipa from echipe

where loc\_clasament =2;



**--merge**

**--sa se actualizeze tabela clasament astfel incat echipele din clasament sa aiba acelasi nume**

**--cu numele echipelor din tabela echipe,iar pentru cele care nu sunt in clasament sa se adauge**

**--valorile coloanelor loc\_clasament si numeechipa--**

merge into clasament using echipe

on(clasament.numeechipa=echipe.numeechipa)

when matched then

update set clasament.numeechipa=echipe.numeechipa

when not matched then

insert (clasament.loc\_clasament,clasament.numeechipa) values (echipe.loc\_clasament,echipe.numeechipa);

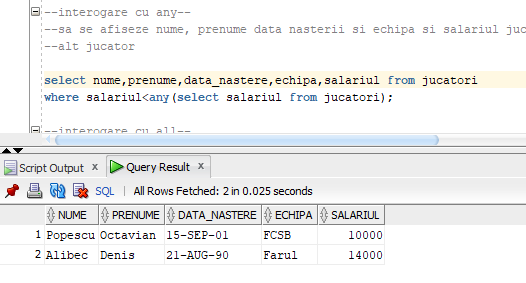
**--interogare cu any--**

**--sa se afiseze nume, prenume data nasterii si echipa si salariul jucatorilor care au salariul mai mic decat al oricarui**

**--alt jucator**

select nume,prenume,data\_nastere,echipa,salariul from jucatori

where salariul<any(select salariul from jucatori);



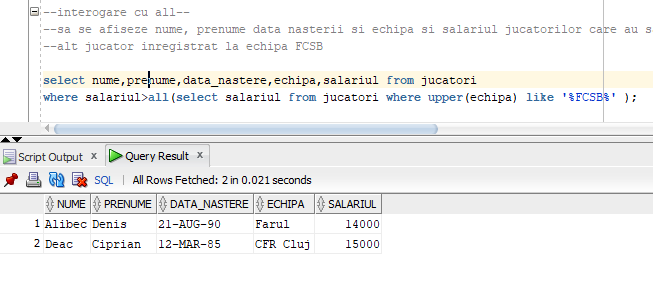
**--interogare cu all--**

**--sa se afiseze nume, prenume data nasterii si echipa si salariul jucatorilor care au salariul mai mare decat al fiecarui**

**--alt jucator inregistrat la echipa FCSB**

select nume,prenume,data\_nastere,echipa,salariul from jucatori

where salariul>all(select salariul from jucatori where upper(echipa) like '%FCSB%' );



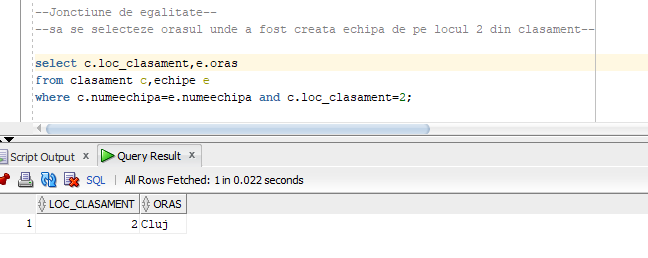
**--Jonctiune de egalitate--**

**--sa se selecteze orasul unde a fost creata echipa de pe locul 2 din clasament--**

select c.loc\_clasament,e.oras

from clasament c,echipe e

where c.numeechipa=e.numeechipa and c.loc\_clasament=2;



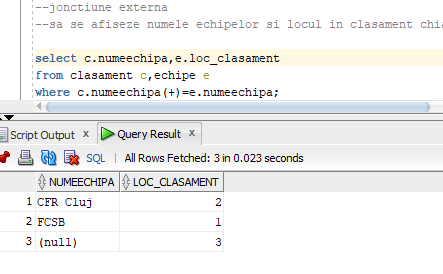
**--jonctiune externa**

**--sa se afiseze numele echipelor si locul in clasament chiar daca n-au fost adaugate in tabela clasament(n-am adaugat toate inregistrarile in tabela clasament tocmai pentru a rezolva aceasta jonctiune externa)**

select c.numeechipa,e.loc\_clasament

from clasament c,echipe e

where c.numeechipa(+)=e.numeechipa;

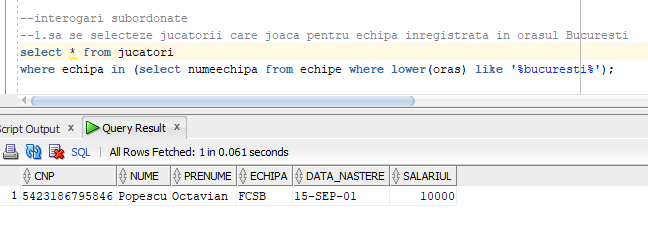


**--interogari subordonate**

**--1.sa se selecteze jucatorii care joaca pentru echipa inregistrata in orasul Bucuresti**

select \* from jucatori

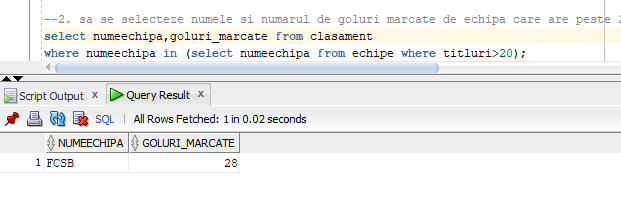
where echipa in (select numeechipa from echipe where lower(oras) like '%bucuresti%');



**--2. sa se selecteze numele si numarul de goluri marcate de echipa care are peste 20 de titluri castigate**

select numeechipa,goluri\_marcate from clasament

where numeechipa in (select numeechipa from echipe where titluri>20);



**--functii--**

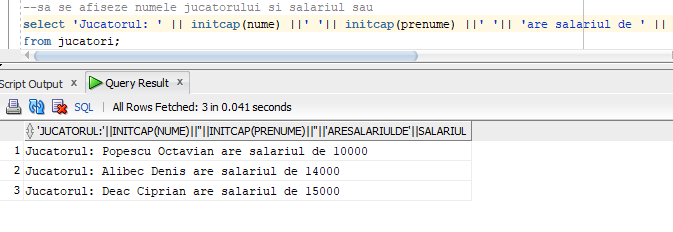
**--upper a fost folosit mai sus**

**--concat**

**--sa se afiseze numele jucatorului si salariul sau**

select 'Jucatorul: ' || initcap(nume) ||' '|| initcap(prenume) ||' '|| 'are salariul de ' || salariul

from jucatori;

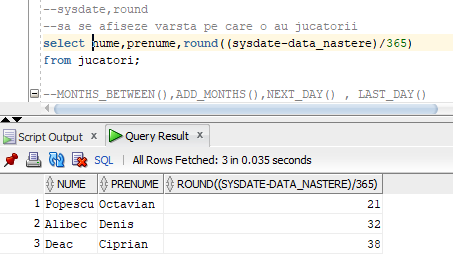


**--sysdate,round**

**--sa se afiseze varsta pe care o au jucatorii**

select nume,prenume,round((sysdate-data\_nastere)/365)

from jucatori;



**--MONTHS\_BETWEEN(),ADD\_MONTHS(),NEXT\_DAY() , LAST\_DAY()**

**--sa se afiseze jucatorii,data nasterii acestora,numarul de luni intre data nasterii**

**--si data curenta,urmatoarea zi de duminica de dupa nasterea acestora,**

**--ultima zi din luna din care fac parte data nasterii,**

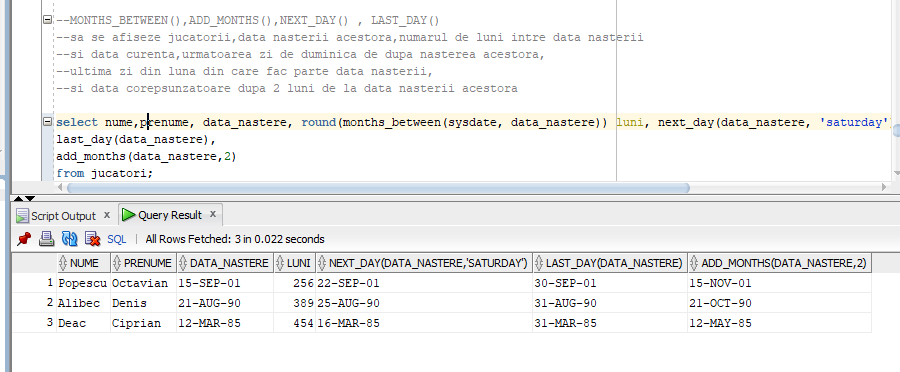
**--si data corepsunzatoare dupa 2 luni de la data nasterii acestora**

select nume,prenume, data\_nastere, round(months\_between(sysdate, data\_nastere)) luni, next\_day(data\_nastere, 'saturday'),

last\_day(data\_nastere),

add\_months(data\_nastere,2)

from jucatori;

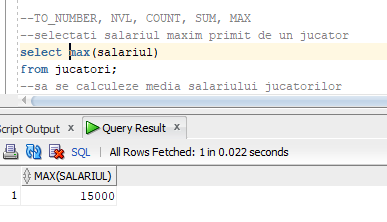


**--TO\_NUMBER, NVL, COUNT, SUM, MAX**

**--selectati salariul maxim primit de un jucator**

select max(salariul)

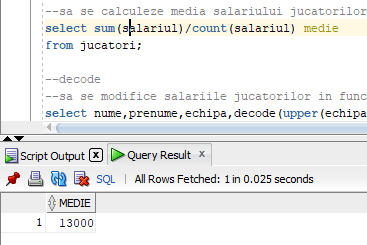
from jucatori;



**--sa se calculeze media salariului jucatorilor**

select sum(salariul)/count(salariul) medie

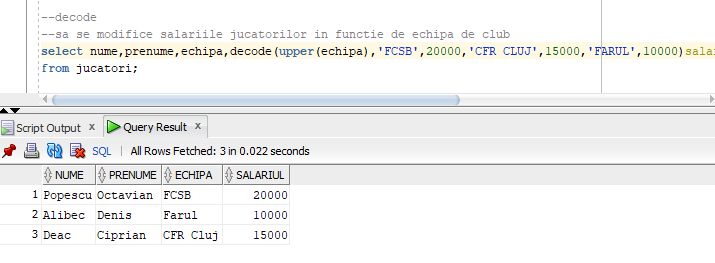
from jucatori;



**--decode**

**--sa se modifice salariile jucatorilor in functie de echipa de club**

select nume,prenume,echipa,decode(upper(echipa),'FCSB',20000,'CFR CLUJ',15000,'FARUL',10000) salariul

from jucatori; 

**--case**

**--sa se modifice salariile jucatorilor in functie de echipa de club**

select nume,prenume,echipa,

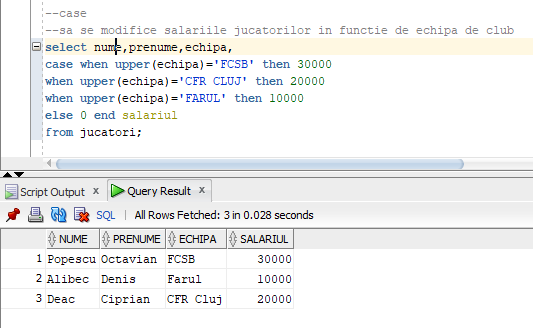
case when upper(echipa)='FCSB' then 30000

when upper(echipa)='CFR CLUJ' then 20000

when upper(echipa)='FARUL' then 10000

else 0 end salariul

from jucatori;



**--operatorul minus**

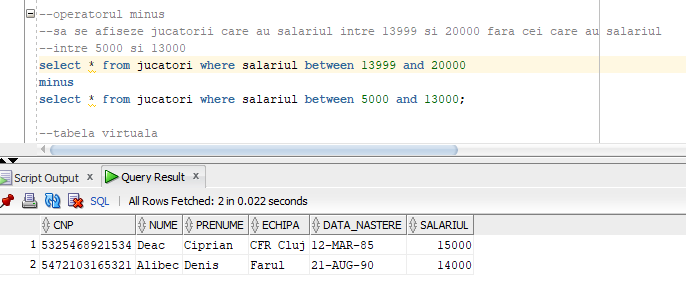
**--sa se afiseze jucatorii care au salariul intre 13999 si 20000 fara cei care au salariul**

**--intre 5000 si 13000**

select \* from jucatori where salariul between 13999 and 20000

minus

select \* from jucatori where salariul between 5000 and 13000;

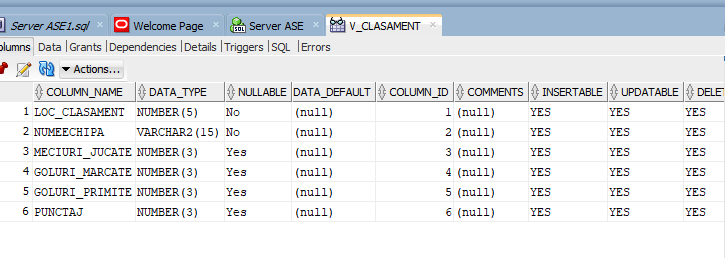


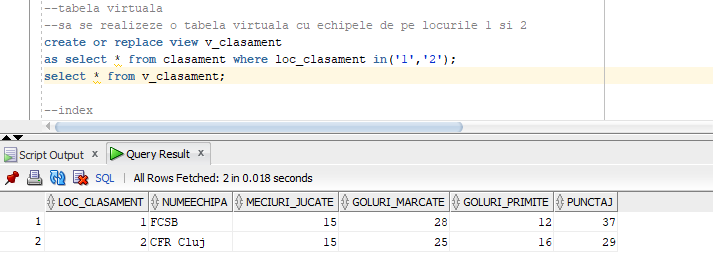
**--tabela virtuala**

**--sa se realizeze o tabela virtuala cu echipele de pe locurile 1 si 2**

create or replace view v\_clasament

as select \* from clasament where loc\_clasament in('1','2');

select \* from v\_clasament; 



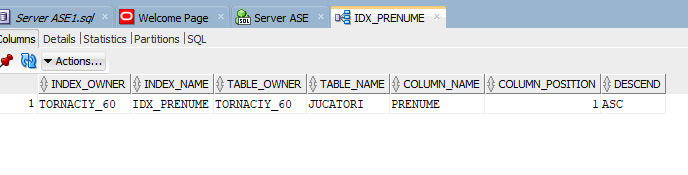
**--index**

**--sa se creeze un index pe tabela jucatori pe coloana prenume**

create index idx\_prenume on jucatori(prenume);

select \* from jucatori where prenume ='Octavian';

select \* from user\_indexes;



**--secventa**

**--sa se creeze o secventa pentru asigurarea unicitatii cheii primare din tabela clasament**

create sequence seq\_loc\_clasament

start with 1 increment by 1

maxvalue 20 nocycle;

select \* from user\_sequences;

