
Correction du DS Informatique N°2

Classes: 2ème année SM et SP

Durée: 1 heure

Documents non autorisés

Exercice 1:

1. $\Pi_{\text{nom,type}}(\text{Spectacles})$
2. $\Pi_{\text{nom}}(\sigma_{\text{nb_places}=100}(\text{Salles}))$
3. $\Pi_{\text{nom_spectacle,nom_salle}}(\sigma_{\text{prix} \leq 40}(\text{Representations}))$
4. $R = \sigma_{\text{date_r}='24-03-18'}(\text{Representations})$
 $\Pi_{\text{nom,duree}}(R \bowtie_{(R.\text{nom_spectacle}=\text{Spectacles}.\text{nom_spectacle})} \text{Spectacles})$
5. $R = \sigma_{\text{nom_spectacle}='ZIARA'}(\text{Representations})$
 $\Pi_{\text{date,nom_salle,adresse}}(R \bowtie_{(R.\text{nom_salle}=\text{Salles}.\text{nom_salle})} \text{Salles})$
6. $R = \sigma_{\text{nom_spectacle}='ABDELLI SHOW'}(\text{Representations})$
 $\gamma_{\text{compte}(\text{date_r})}(R)$
7. $\Pi_{\text{nom_salle}}(\sigma_{\text{nom_spectacle}='LOTFI BOUCHNEK'}(\text{Representations})) \cap \Pi_{\text{nom_salle}}(\sigma_{\text{nom_spectacle}='NOTRE DAME DE PARIS'}(\text{Representations}))$
8. $R = \sigma_{\text{date_r}='06-4-18' \text{ and } \text{nom_spectacle}='OURS ETTBOU'}(\text{Billets})$
 $\gamma_{\text{compte}(\text{num_billet})}(R)$
9. $\Pi_{\text{nom_salle}}(\text{Salles}) - \Pi_{\text{nom_salle}}(\sigma_{\text{date_r}='17-05-18'}(\text{Representations}))$
10. $R1 = \text{date_r,nom_spectacle,nom_salle } \gamma_{\text{compte}(\text{num_billet})}(\text{Billets})$
 $R2 = R1 \bowtie_{(R1.\text{nom_salle} = \text{Salles}.\text{nom_salle})} \text{Salles}$
 $\Pi_{\text{nom_spectacle, date_r,nom_salle}}(\sigma_{\text{compte}(\text{num_billet})=\text{nb_places}}(R2))$

Exercice 2:

1. select nom, specialite from medecins
2. select specialite, count(nom) from medecins group by specialite
3. select nom, tel from patients where No_SS in (select No_SS from consultations where date="05-04-18") order by nom;

```
select nom,tel from patients join consultations on  
patients.No_SS=consultations.No_SS where date ="14-03-18" order by nom;
```

```
select nom,tel from patients join (select No_SS from consultations where date  
="14-03-18") as C on patients.No_SS=C.No_SS order by nom
```

4. select code, libelle from medicaments where classe__therapeutique="anti inflammatoire"
5. select matricule, count(id_consultation) from consultations where date="09-03-18" group by matricule
6. select distinct patients.nom from patients,consultations,medecins where patients.No_SS=consultations.No_SS and consultations.matricule=medecins.matricule and Medecins.Nom="Ben Moussa Iheb"
7. select libele, nb_prise, nb_jour from medicaments join prescriptions on medicaments.code_medicament=prescriptions.code_medicament where id_consultation=(select id_consultation from consultations where No_SS=103 and date="12-03-18" and matricule=(select matricule from medecins where nom="Fekih Elyes"))
8. select distinct matricule from consultations as c where not exists (select * from prescriptions,consultations where prescriptions.id_consultation = consultations.id_consultation and c.matricule = consultations .matricule and code_medicament=(select code from medicaments where libele='Rosal'))
9. select code_medicament,count(*) as nb from prescriptions group by code_medicament having nb>=3
10. select matricule,count(*) from(select distinct matricule,no_ss from consultations) group by matricule
11. select distinct nom from patients,consultations where patients.No_ss=consultations.no_ss and id_consultation in (select id_consultation from prescriptions where code_medicament in (select code from medicaments where classe__therapeutique='antihistaminique'))
12. select libele from medicaments where code not in (select distinct code_medicament from prescriptions)

13. select distinct no_ss from consultations where matricule in (select matricule from medecins where specialite="cardio")
14. select nom,No_SS from patients where not exists (select * from consultations where patients.no_ss=consultations.no_ss and matricule=13)

Exercise 3

1- def Creer_Tables(cur):

```
cur.execute("create table if not exists Spectacles(nom_spectacle TEXT PRIMARY KEY,duree INTEGER,type TEXT)")
```

```
cur.execute("create table if not exists Salles(nom_salle TEXT PRIMARY KEY,adresse TEXT, nb_places INTEGER)")
```

```
cur.execute("create table if not exists Representations(nom_spectacle TEXT,date_r TEXT,nom_salle TEXT,prix INTEGER, PRIMARY KEY(nom_spectacle,date_r))")
```

```
cur.execute("create table if not exists Billet(num_billet INTEGER,nom_spectacle TEXT,date_r TEXT, nom_salle TEXT,nom_client Text, PRIMARY KEY(num_billet,nom_spectacle,date_r))")
```

2- def Insérer_Spectacle(cur):

```
#L=[]
```

```
while 1:
```

```
N=input("nom spectacle: ")
```

```
if N!='#':
```

```
    D=int(input("durée: "))
```

```
    T=input("type: ")
```

```
    cur.execute(" insert into Spectacles values(?,?,?)",(N,D,T))
```

```
    #L.append((N,D,T))
```

```
else:
```

```
    break
```

```
#cur.executemany(" insert into Spectacles values(?,?,?)",L)
```

3- def RequeteI_SQL(Cur,R):

```
cur.execute(R)
```

```
4- #main
import sqlite3
con=sqlite3.connect("Reservation.sqlite")
cur=con.cursor()
Creer_Tables(cur)
Inserer_Spectacle(cur)
con.commit()
#Mise_a_jour_Spectacle(cur,120,'Houria')
R="UPDATE Spectacles SET duree=60 WHERE nom_spectacle='Houria'"
RequeteI_SQL(cur,R)
con.commit()
R="select nom_spectacle from Spectacles where type='concert'"
RequeteI_SQL(cur,R)
for i in cur:
    print(i)
cur.close()
con.close()
```