```sql
use tp_bdd;

/**
  - insert into table values (XX,XX,XX);
  - insert into table (param1, param2, param3) values (XX,XX,XX);
  - insert into table (param1, param2, param3) values (XX,XX,XX),
(XX,XX,XX);
  - insert into table (param1, param2, param3) values (XX,XX,XX) values
(XX,XX,XX), (XX,XX,XX);
**/

/** INSERT : **/

insert into Segment values ('130.120.80', 'Brin RDC', null);
insert into Segment values ('130.120.81', 'Brin 1er etage', null);
insert into Segment values ('130.120.82', 'Brin 2eme etage', null);

insert into Salle values ('s01', 'Salle 1','3','130.120.80');
insert into Salle values ('s02', 'Salle 2','2','130.120.80');
insert into Salle values ('s03', 'Salle 3','2','130.120.80');
insert into Salle values ('s11', 'Salle 11','2','130.120.81');
insert into Salle values ('s12', 'Salle 12','1','130.120.81');
insert into Salle values ('s21', 'Salle 21','2','130.120.82');
insert into Salle values ('s22', 'Salle 22','0','130.120.83');
insert into Salle values ('s23', 'Salle 23','0','130.120.83');

insert into Poste values ('p1', 'Poste 1','130.120.80','01','TX','s01');
insert into Poste values ('p2', 'Poste 2','130.120.80','02', 'UNIX','s01');
insert into Poste values ('p3', 'Poste 3','130.120.80','03','TX','s01');
insert into Poste values ('p4', 'Poste 4','130.120.80','04','PCWS','s02');
insert into Poste values ('p5', 'Poste 5','130.120.80','05','PCWS','s02');
insert into Poste values ('p6', 'Poste 6','130.120.80','06','UNIX','s03');
insert into Poste values ('p7', 'Poste 7','130.120.80','07','TX','s03');
insert into Poste values ('p8', 'Poste 8','130.120.81','01','UNIX','s11');
insert into Poste values ('p9', 'Poste 9','130.120.81','02','TX','s11');
insert into Poste values ('p10', 'Poste
10','130.120.81','03','UNIX','s12');
insert into Poste values ('p11', 'Poste
11','130.120.82','01','PCNT','s21');
insert into Poste values ('p12', 'Poste
12','130.120.82','02','PCWS','s21');

insert into Logiciel values ('log1', 'Oracle 6', '1995-05-13', '6.2',
'UNIX', 3000);
insert into Logiciel values ('log2', 'Oracle 8', '1999-09-15', '8i',
'UNIX', 5600);
insert into Logiciel values ('log3', 'SQL Server', '1998-04-12', '7',
'PCNT', 2700);
insert into Logiciel values ('log4', 'Front Page', '1997-06-03', '5',
'PCWS', 500);
insert into Logiciel values ('log5', 'Windev', '1997-05-12', '5', 'PCWS',
750);
insert into Logiciel values ('log6', 'SQL*NET', null, '2.0', 'UNIX', 500);
insert into Logiciel values ('log7', 'I. I. S.', '2002-04-12', '2', 'PCNT',
810);
insert into Logiciel values ('log8', 'DreamWeaver', '2003-09-21', '2.0',
'BeOS', 1400);

insert into Types values ('TX',  'Terminal X-Window');
insert into Types values ('UNIX', 'Système Unix');
insert into Types values ('PCNT', 'PC Windows NT');
```

```sql
insert into Types values ('PCWS', 'PC Windows');
insert into Types values ('NC', 'Network Computer');

/** SEQUENCE MYSQL **/

alter table Installer modify numIns integer(5) AUTO_INCREMENT;
/**alter table Installer AUTO_INCREMENT=1;**/

insert into Installer values ('p2' , 'log1' , null , '2003-05-15' , null);
insert into Installer values ('p2' , 'log2' , null , '2003-09-17' , null);
insert into Installer values ('p4' , 'log5', null , null , null);
insert into Installer values ('p6' , 'log6', null , '2003-05-20' , null);
insert into Installer values ('p6' , 'log1', null , '2003-05-20' , null);
insert into Installer values ('p8' , 'log2', null , '2003-05-19' , null);
insert into Installer values ('p8' , 'log6', null , '2003-05-20' , null);
insert into Installer values ('p11' ,'log3', null , '2003-04-20' , null);
insert into Installer values ('p12' ,'log4', null , '2003-04-20' , null);
insert into Installer values ('p11' ,'log7', null , '2003-04-20' , null);
insert into Installer values ('p7' , 'log7', null , '2002-04-01' , null);
/** insert into Installer (nPoste, nLog, dateIns, delai)  values ('p2' ,
'log1' , '2003-05-15' , null); **/

/** SEQUENCE SQL : **/

/**CREATE SEQUENCE incrementInstallerIns START WITH 1 INCREMENT BY 1;**/
/**insert into Installer values  ('p2', 'log1',
incrementInstallerIns.nextval, '2003-05-15', null);
insert into Installer values  ('p2', 'log2', incrementInstallerIns.nextval,
'2003-09-17', null);
insert into Installer values  ('p4', 'log5', incrementInstallerIns.nextval,
null, null);
insert into Installer values  ('p6', 'log6', incrementInstallerIns.nextval,
'2003-05-20', null);
insert into Installer values  ('p6', 'log1', incrementInstallerIns.nextval,
'2003-05-20', null);
insert into Installer values  ('p8', 'log2', incrementInstallerIns.nextval,
'2003-05-19', null);
insert into Installer values  ('p8', 'log6', incrementInstallerIns.nextval,
'2003-05-20', null);
insert into Installer values  ('p11','log3', incrementInstallerIns.nextval,
'2003-04-20', null);
insert into Installer values  ('p12','log4', incrementInstallerIns.nextval,
'2003-04-20', null);
insert into Installer values  ('p11','log7', incrementInstallerIns.nextval,
'2003-04-20', null);
insert into Installer values  ('p7', 'log7', incrementInstallerIns.nextval,
'2002-04-01', null);**/

/**
  WITH FOREIGN KEY :
    - insert into table values ((select XX from XX where condition =
condition), XX, XX, XX)
**/
```

```sql
use tp_bdd;

update Segment set etage = 0 where indIp = '130.120.80';
update Segment set etage = 1 where indIp = '130.120.81';
update Segment set etage = 2 where indIp = '130.120.82';

update Logiciel set prix = prix - prix * 0.10 where typeLog = 'PCNT';
/**
update Segment set etage = 0 where nomSegment = 'Brin RDC';
update Segment set etage = 1 where nomSegment = 'Brin 1er etage';
update Segment set etage = 2 where nomSegment = 'Brin 2e etage';

update Segment set etage = case nomSegment
    when 'Brin RDC' then 0
    when 'Brin 1er etage' then 1
    when 'Brin 2e etage' then 2
    END
where nomSegment in ('Brin RDC','Brin 1er etage','Brin 2e etage');
**/


use tp_bdd;

/** DROP TABLE DATABSE CASCADE NOT WORKING ON MYSQL **/

SET FOREIGN_KEY_CHECKS = 0;

drop table Segment;
drop table Salle;
drop table Poste;
drop table Logiciel;
drop table Installer;
drop table Types;

SET FOREIGN_KEY_CHECKS = 1;
```

```sql
use tp_bdd;


/** ADD COLUMN **/
alter table Segment add column nbSalle tinyint(2) default 0, add column
nbPoste tinyint(2) default 0;
alter table Logiciel add column nbInstall tinyint(2) default 0;
alter table Poste add column nbLog tinyint(2) default 0;

/** OTHER METHOD
  alter table Segment add column (nbSalle tinyint(2) default 0, nbPoste
tinyint(2) default 0);
 */

describe Segment;
describe Logiciel;
describe Poste;

select * from Segment;
select * from Logiciel;
select * from Poste;

/** CHANGE COLUMN **/

alter table Salle modify column nomSalle varchar(30);
alter table Segment modify column nomSegment varchar(15);

/** ERREUR car on a une valeur insérée qui à un nomSegments qui est > 14
**/
/** alter table Segment modify column nomSegment varchar(14); **/

describe Salle;
describe Segment;

select * from Salle;
select * from Segment;

/** ADD CONSTRAINTS **/

/** Check constraints **/

select indIP from Salle where indIP not in (select indIP from Segment);
select nSalle from Poste where nSalle not in (select nSalle from Salle);
select indIp from Poste where indIP not in (select indIP from Segment);
select typePoste from Poste where typePoste not in (select TypeLP from
Types);
select nLog from Installer where nLog not in (select nLog from Logiciel);
select nPoste from Installer where nPoste not in (select nPoste from
Poste);
select typeLog from Logiciel where typeLog not in (select typeLP from
Types);

/** Clean Data **/

delete from Salle where indIP not in (select indIP from Segment);
insert into Types values ('BeOS','Système Be');

/** Add Constraints **/

alter table Installer add unique uc_installer (nPoste, nLog);
```

```sql
alter table Salle add constraint fk_Salle_indIp foreign key (indIp)
references Segment(indIp);
alter table Poste add (constraint fk_Poste_indIp foreign key (indIp)
references Segment(indIp),constraint fk_Poste_nSalle foreign key (nSalle)
references Salle(nSalle), constraint fk_Poste_typePoste_Types foreign key
(typePoste) references Types(TypeLP));
alter table Installer add (constraint fk_Installer_nLog foreign key (nLog)
references Logiciel(nLog),constraint fk_Installer_nPoste foreign key
(nPoste) references Poste(nPoste));
alter table Logiciel add constraint fk_Logiciel_typeLog_Types foreign key
(typeLog) references Types(TypeLP);
```